NORTHEAST MARKETING ISSUE
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1.9 Million Tons Potash Produced in First Half of 1958

Bureau of Mines Reports Stocks on Hand as Being At High Level, However

WASHINGTON — A total of 1.9 million short tons of marketable potassium salts were produced in the U.S. in the first half of 1958, according to reports by producers to the Bureau of Mines, U.S. Department of the Interior. This tonnage contained 1.1 million tons of K_2O equivalent, the report stated.

Stocks in the hands of producers at the end of June, 1958, remained at a high level, the bureau reported. The amount on hand was reported as being nearly 800,000 tons salts containing over 470,000 tons K_2O equivalent.

The bureau explained that the potash producers' canvass was revised beginning with 1958 to enable publication of data comparable with fertilizer statistics published by other governmental agencies and the fertilizer trade itself. It was pointed out that although its present report covers only the first six months of 1958, all future compilations will cover 12-month periods ending either June 30 or December 31 each year.

Imports of potash continued to be equivalent to about 10% of U.S. production during the first half of the year. The main supplying countries were East and West Germany, France and Spain. However, exports exceeded imports. Imports of fertilizer grade potash totaled 188,000 tons as compared to an exported tonnage of 232,000.

Federal Controls of Plant Regulators, Desiccants, Defoliants Asked by Group

WASHINGTON — That defoliants, desiccants, plant regulators and nematodes should be brought within the scope of the Federal Insecticide, Fungicide and Rodenticide Act was urged by two groups recently. These groups, the Association of American Fertilizer Control Officials and the Association of American Pesticide Control Officials met here Oct. 17 and 18.

Actions by these two associations of state and federal regulatory officials coincide with recommendations stemming both from the National Agricultural Chemicals Assn. and the National Plant Food Institute. Joint investigations over the past two years were required by the uncertainty over whether the four types of agricultural chemicals should be placed under fertilizer or pesticide jurisdiction.

This action now paves the way for complete cooperation among public administrative and private industry officials in pushing for the amendment to the Federal Act.

Because of the nature of defoliant, dessicant, plant regulator and nematocide compounds, their purposes in agriculture and the effect they have after application, there has been considerable debate as to how the distribution and use of the products will be regulated. Some states have already made interim decisions about regulation; yet it was felt that further national group action be deferred until a federal statute will clearly put the products in the proper category. It is anticipated the various states then will follow the lead and the products will finally have proper definition under law.

In a speech to AAPCO members, Lea S. Hitchner, executive vice president of the NAC, announced that the NAC is working on legislation intended for introduction at the next session of Congress.

"Our proposed legislation will follow along the lines of the proposed amendment to the Uniform State Insecticide, Fungicide and Rodenticide Act," he said. "We hope the USDA will approve our proposal and we see no reason why it should not be passed before Congress adjourns next July.

"We believe that there would be difficulties for both the control officials and industry if the states were to adopt one pattern of control over these products while the federal government adopted another," Mr. Hitchner said. "We want to solicit your support of the amendment when it is before the Congress."

This the AAPCO did at its final business session on Oct. 18. The association also concurred with the AAFCO and the two industry trade associations by passing a resolution accepting the responsibilities of control of the plant regulatory chemicals in part as follows:

". . . . . whereas there are now being produced and sold a number of agricultural chemicals intended to affect the physiological processes of plants such as gibberellins, plant regulators, desiccants and defoliants which are now subject to regulatory control in a limited number of states under at least three different types of laws, ... be it resolved that . . . . . control over sale and distribution, in the interest of uniformity of regulatory

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Taking Fertilizer Samples at Plant Favored by Officials

WASHINGTON, D. C. — Approval of a move to place plant regulators and other similar products under the Federal Insecticide, Fungicide and Rodenticide Act and progress toward more uniform commercial fertilizer tonnage reports among the various states were two major items covered at the 12th annual convention of the Association of American Fertilizer Control Officials here Oct. 17.

Placing authority over plant regulators, desiccants, defoliants and nematocides in the hands of the pesticide control officials (reported elsewhere in this issue) came following considerable group committee action with members of the pesticide and fertilizer industries and the Association of American Pesticide Control Officials.

The need for state fertilizer tonnage statistics long has been pointed up by the fertilizer industry. The AAFCO has had a committee functioning on the subject under the direction of Bruce Poundstone, Kentucky control official. Not all states have laws which provide the means for such reporting, but Mr. Poundstone indicated progress along these lines and presented the convention with a suggested uniform tonnage report.

Changes and expansion of the fertilizer industry have made the problem of regulatory control more complex, J. J. Taylor, of Florida, president of the AAFCO, said in his introductory remarks. In the years 1939 to 1955, tonnage output of fertilizer quadrupled and a wider variety of types and grades plus methods of distribution have necessitated certain changes in regulatory methods.

For example, bulk deliveries of fertilizer complicate sampling procedures, the president pointed out. More sampling now appears to be desirable at the plant location rather than at the destination of shipment or in transit. Sampling is found to be most satisfactory from the conveyor belt or at the discharge point. Fertilizer companies show good cooperation with state control officials in plant sampling, Mr. Taylor reported.

The AAFCO president called attention to the chemical control research project being sponsored by the National Plant Food Institute. In the past, he said, changes in official Association of Official Agricultural Chemists methods necessarily have been slow. But now the results of the chemical control project will help in keeping up with changes in the industry and will provide the evidence to facilitate changes in approved laboratory methods.

Dr. Oris V. Wells of the Agricultural Marketing Service, analyzed the farm price situation and agricultural outlook for next year. The speaker stated that this year's upturn in farm income, in spite of the so-

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Analytical Methods of Determining Plant Food Content Discussed by Technicians

WASHINGTON—A conference on chemical control problems with emphasis on methods of analyzing fertilizers for determination of moisture, free acid, available P_2O_5 and other content was attended by more than 100 persons at the Shoreham Hotel here Oct. 16. Sponsored by the National Plant Food Institute, the meeting was under the direction of Dr. Vincent Sauchelli, chairman of the chemical control committee of NPFI. Those present included fertilizer manufacturers, agronomists and state control officials.

Speakers pointed out the increasing complexity of high analysis fertilizers and discussed analytical methods and equipment to determine the grade, check actual content against labels, and to get accurate samples.

A talk on the relation of the state regulatory office to the local fertilizer industry was presented by Bruce Poundstone, state chemist of Kentucky. He emphasized the need for complete understanding between state agencies and the industry, pointing out that there is much common ground on which the two groups may stand.

In his state, he reported, the analysis of fertilizer grades is on the increase as is true in most areas. Thus the average number of units¢ to the ton is much greater than it was just a few years ago. This situation makes it more difficult for the fertilizer manufacturer to meet all of the state requirements, but at the same time, he said, the officials adopt a more liberal attitude. State people try to help the companies to make accurate analyses and take into consideration the factors involved.

Naturally, the speaker said, there are a few firms whose products quite consistently fail to meet all the requirements, and these firms are of course known to the inspectors. By

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Inside You'll Find

25 YEARS OF MEMORIES . . .

NAC Past Presidents Reminisce

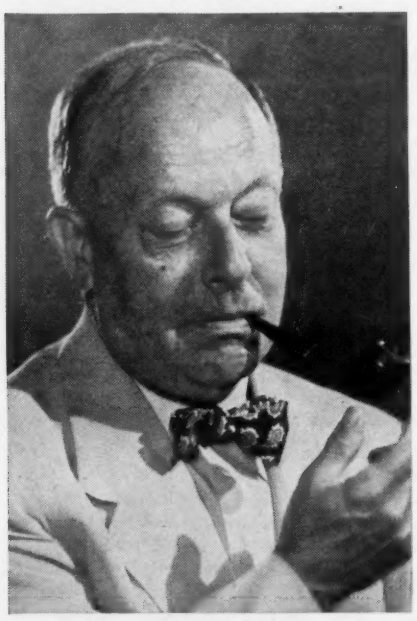
AN INFINITE variety of problems, events, challenges and situations is part of the history of any organization over a 25-year period. The National Agricultural Chemicals Assn. has had its share of these, and possibly more than its portion.

Below are the reminiscences of past presidents of NAC and its predecessor organization, the Agricultural Insecticide and Fungicide Assn. The men who headed these groups recall here in poignant style some of the significant happenings over the years, and remind their readers that the steady progress made by NAC has come about only through dedicated effort over the past quarter-century.

The presidents' recollections cover many situations; of war-time shortages, development of new materials having profound effect on marketing, legislative acts tending to restrict the industry, congressional investigations, public relations problems, cooperation with governmental agencies on both federal and state levels and technical problems dealing with matters such as toxicology and application.

The presidents, from the Hitchner to Vernon, have here prepared a history of the association seldom equalled in its insight and its human aspects. Croplife is grateful to all of these men for presenting their reminiscences.—Ed.

Growing Pains Acute in Early Years of Assn.



By Lea S. Hitchner
Executive Secretary
National Agricultural Chemicals Assn.
Washington, D.C.

ASSN. PRESIDENT 1934-40

IN LOOKING back over the years when the original Agricultural Insecticide and Fungicide Assn. was formed, the memory of many events crosses the mind. In studying them, it is clear that the old AIFA and its successor, the National Agricultural Chemicals Assn., have made tremendous progress in a complicated and often difficult field.

Progress may be calculated both in numbers and in accomplishment. When the original AIFA was chartered in February, 1934, only 14 members were on the roster. Here is a review of conditions at that time, and some of the developments during my term of office which continued to 1940.

The National Industrial Recovery Act had been signed by Congress on June 13, 1933 which, with the Agricultural Adjustment Act signed May 12 of that year, gave the President control of agriculture and industry. The AIFA head was very active in the pesticide industry phases of this operation.

During the period of 1933-38 a credit interchange service was sponsored by the association.

Then, in 1935, the first official discussion of residue problems took place as an investigation of poison residues by the Illinois Agricultural Experiment Station, such investigation being proposed by the American Pomological Society.

In 1936 the Robinson-Patman Act became law. This legislation created many problems in the industry relating to trade classification. The association was active in seeing that the orderly process of this law was carried out as far as the pesticide industry was concerned.

The association cooperated with industry and the government in establishing a package standardization and simplification program during 1938. The following year, the association sponsored coloration standards for arsenicals by which such products were to be colored pink in order to avoid accidental substitution for foodstuffs. This was part of a safety program which has been expanded greatly through the following years.

In 1939 the first study of freight rate schedules was made by an association-sponsored traffic committee. In later years the importance of this committee's work made it desirable to appoint a standing committee for continued study of this vital phase of the industry's economic growth.

During the same year, industry's role in war production was first studied and regulations were drafted to aid industry's participation in the war effort. By 1940 attempts were being made to obtain industry statistics. This operation has been carried on through the years and has become an important segment of the association's activities.

Also in 1940 the first compilation of pesticide laws was made and the Model Bill program, sponsored by the association, was started. That year also saw the association's first study of product liability insurance.

At the close of this first presidential term in 1940, the association had 40 members.

Better Relations With Government Sought by Trade

By Warren H. Moyer
President, Chipman Chemical Co.
Bound Brook, N.J.

ASSN. PRESIDENT 1940-42

IN 1940 when I was asked to serve as president of the Agricultural Insecticide and Fungicide Assn. (later to become National Agricultural Chemicals Assn.) the concept of constructive collaboration among members of the industry was severely threatened. This was, I believe, primarily the result of an honest effort by the association and its members to carry out the provisions of the depression-born NRA.

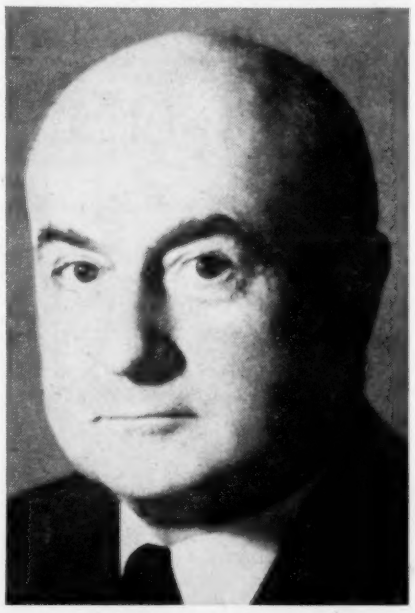
The association and the industry were confronted with a serious challenge by the Federal Trade Commission, and many of the members felt that any attempt at joint efforts for industry welfare was dangerous and doomed to failure. Others, however, were more confident and optimistic, with the result that by a very narrow margin, there was maintained a group of those who were determined to achieve through the association, certain broad objectives for the benefit of agriculture as well as the industry. We believed we could secure a closer collaboration between interested government agencies, farmers and their advisers and the chemical pesticide industry serving them—all in the public interest.

Many problems beset the association in those early days which would have defeated a less patient man than Lea S. Hitchner. Perhaps one of the most difficult problems was that of raising the sights of the members of the industry themselves to a broader concept of the public service which is the basic responsibility of any industry.

My term of service was abbreviated by a call from the War Production Board in 1942. The wartime problems of production and distribution of limited available materials imposed a new strain on our industry like most others. I can say, however, that I believe the standards of simple patriotism and ethics which I had an opportunity to observe from the government point of view left a record of which this industry can well be proud. Many new developments were brought about during this period, to the great advantage of all agriculture, as well as vital public health.

The National Agricultural Chemicals Assn. has carried on under a succession of able presidents and an indefatigable executive secretary to make great strides in service to the industry, to its customers and to the government agencies representing the broad public interest. NAC well deserves the prestige it now enjoys.

Wartime Economy In Industry Creates Many Complications



Joseph B. Cary

By Joseph B. Cary
Food Machinery & Chemical Corp.
San Jose, Cal.

ASSN. PRESIDENT 1942-46

OVERSHADOWED by war clouds, the Association was beset by many unusual situations during the years of my term. The Association will long remember these hectic days of shortages and quotas and the necessary collaboration with governmental agencies to maintain an even keel in the industry.

These were the days when the rationing program for pesticides was proposed . . . a condition opposed by the industry.

We remember many other things having to do with the war times and the stresses in that connection, but the industry was moving ahead in other regards. The Association began a safety program in 1943 which indicated that pesticides are perfectly safe to use if handled and applied in the proper manner. That same year found the industry beginning to step up its studies on application equipment, and numerous conferences were held with the U.S. Department of Agriculture on the production of crops needed to produce the year's food goals.

Other meetings had to do with procedures for pricing under government regulations. The Office of Price Administration was an important entity at that time.

Public relations was coming into its own in 1943, and it was at this time that the AIF News was established, heralding a definite program of public relations. At this time, too, the publicity advisory committee was formed to aid in this respect.

Happily, the war ended and with it many of the acute problems. But not all. The effects of wartime regulations survived for a considerable period after the final shots were fired, and the industry began getting back on its feet again.

"Get Shoes Dusty" Sage Advice of Fourth President

By George F. Leonard
Retired Vice President
Tobacco By-Products & Chemical Corp.
Sarasota, Fla.

ASSN. PRESIDENT 1946-49

IT IS a generally accepted axiom that "Hindsight is better than foresight," but even yet in reviewing the years '46-'49, it seems to me that our industry adjusted rapidly to the

(Turn to PRESIDENTS, page 6)

Minnesota Fertilizer Group Meets to Plan Short Course Program

ST. PAUL—Members of the Minnesota Fertilizer Committee met at the new University of Minnesota Soils Bldg. here Oct. 16 to help plan the 1958 soils and fertilizer short course.

Dr. W. P. Martin, head of the university's soils department, and Dr. C. J. Overdahl, soils specialist and short course chairman, led the discussion of possible short course subjects. The program, now being set up, will be announced at a later date.

Committee members also turned their attention to establishing their organization on a new basis. Originally, the group was organized as the Minnesota Committee of the Middle West Soil Improvement Committee. Subsequently, the Middle West organization was absorbed into the National Plant Food Institute.

M. W. Mawhinney, Smith-Douglass Co., Inc., Albert Lea, Minn., chairman of the Minnesota Committee, conducted the discussion session. Z. H. Beers, Midwest regional manager for the National Plant Food Institute, described the organization of various types of state fertilizer groups. Robert Munson, American Potash Institute, St. Paul, was named temporary secretary of the group.

Final action on setting up the organization of the Minnesota group is expected to be taken early this winter.

Association Meeting

DENVER, COLO.—The 1959 annual meeting of the Colorado Agricultural Chemicals Assn. will be held Jan. 29-30 at the Cosmopolitan Hotel in Denver, announced F. Farrell Higbee, publicity chairman. Members planning to attend are asked to contact D. E. Garrison, Box 623, Greeley, Colo., the association secretary.

School Dates Set

URBANA, ILL.—The Illinois Custom Spray Operators' Training School, 1959 version, will be held here Jan. 28-29 at the college of agriculture, University of Illinois. Making the announcement was H. B. Petty, associate entomologist. Program plans for the school will be ready in December, Dr. Petty said.

William E. Plummer

WORKS MANAGER — William E. Plummer has been appointed works manager of the fertilizer plant of Canadian Industries, Ltd., at Chatham, Ontario. He replaces Murray Smith who has retired after 32 years. Mr. Plummer received his degree in chemistry and biology from Queen's University, Kingston. He joined C-I-L in 1947 as a supervisor in the company's fertilizer plant at Hamilton where he became production superintendent in 1956. He was transferred to the Chatham plant as assistant works manager in June, 1958.

E. C. Gerdes Establishes New Ag Chemical Firm

MINNEAPOLIS — Formation of a new firm concentrating on the sale and marketing of agricultural chemicals, feed additives and animal health products, has been announced by E. C. Gerdes, who will head the company. He expects to operate throughout the middle west under the firm name of the E. C. Gerdes Co. It will make its headquarters in Minneapolis.

Mr. Gerdes explains that the company will operate as manufacturers' representatives or marketing consultants for manufacturers desirous of establishing markets in the midwestern agricultural markets.

Formerly associated with the Geigy Agricultural Chemical Co. and Diamond Black Leaf Co. as midwest manager and product manager of a unit of Diamond Alkali Co., Mr. Gerdes has spent many years in manufacturing, selling and administering agricultural chemicals and other products throughout the entire United States.

CONTROL

(Continued from page 1)

control, should be imposed in accordance with the following principles:

"(1) Any regulatory control deemed necessary over agricultural chemicals intended to affect the physiological processes of plants such as gibberellins, plant regulators, desiccants and defoliants, other than plant foods, should be imposed by amendment to the Uniform State Insecticide, Fungicide and Rodenticide Act and the counterpart state acts, rather than under the State Fertilizer laws.

"(2) In the case of a product which consists of a combination of both plant foods, and pesticides or other regulated chemicals or a product claiming both plant food and other regulated chemical value, it should be subjected to control under both the applicable aforementioned laws."

About 25 state and federal control officials and representatives of the pesticide industry attended the meeting which included discussions of various problems related to distribution, labeling and control of pesticide products. The meeting at the Shoreham Hotel concluded a series of similar conferences covering the fertilizer industry and the feed industry.

In his opening remarks AAPCO president F. H. Gates of Denver paid tribute to industry for their efforts to remain within the boundaries of state and federal pesticide regulations. Out of the thousands of products in this field, only 7% were found to be misregistered and 5% with formulation deficiencies, Mr. Gates declared. These irregularities were attributed to only .5% of the formulators active in this business, and we feel certain that most of these mistakes were "honest errors."

The president singled out two major questions which have been receiving considerable attention: (1) "Crash programs" of insecticide application probably are on the wane, he said. We need to give full consideration to all sides of the problem before mass spraying and other forms of specific control are approved. (2) Public relations must be intensified. We must retract and correct erroneous public opinion concerning pesticide applications, he believed.

Mr. Hitchner reviewed the progress of the NAC since its inception 25 years ago. He listed the NAC philosophy regarding legislation: (1) it should adequately protect the public with a minimum burden to industry, (2) effectiveness of legislation is only as good as its administration, (3) education of all interested groups is necessary in order to minimize the need for legislation and regulation, and if legislation is passed, to make the law work effectively, and (4) legislation should not stifle research, greater production and better pest control.

New president of the AAPCO is W. C. Geagley, Lansing, Mich. Vice president is J. D. Patterson of Oregon, and re-elected secretary-treasurer is A. B. Heagy, College Park, Md. In addition to the officers and Mr. Gates, ex-president, the executive committee includes J. T. Coyne, Washington, D.C.; E. R. Winterle, Tallahassee, Fla.; R. A. Moncrief, Atlanta, Ga.; H. J. Fisher, New Haven, Conn., and Robert H. Guntert, Topeka, Kansas.

A dinner honoring the members of the AAPCO was given by the NAC on Oct. 17 at the Shoreham.

PESTICIDES

(Continued from page 1)

the same token, by far the larger portion of companies doing business in the state have good records and it is only occasionally that they are found wanting.

It was pointed out that some grades of plant food are more susceptible to irregularities than others. One grade, 8-24-16, he said, had a particularly bad record, even when made by companies where standards were consistently high. The deficiencies began to show up in February of this year, Mr. Poundstone reported, and continued through April. Of 58 samples taken during that time, only 9% were above warranty.

As a result of the recurrent difficulties, the manufacturers and state officials cooperated to drop the grade. "We all worked together to get rid of a headache," the speaker recalled. Most of the firms are now making a 6-18-12 instead, and much less trouble is noted.

Not only do the state officials compare companies, but also grades made by different firms. A standard grade such as 10-10-10, for example, provides a yardstick for determining how consistent different makers are in meeting their guarantees.

It was noted in a number of cases, however, that faulty machinery and unsuitable quality control on the part of some makers are the source of difficulty.

Highly technical discourses on laboratory methods of determining fertilizers were presented by a number of speakers. John Mandel, U.S. Bureau of Standards, Washington, talked on statistical methods in analytical chemistry; E. Glocker, research laboratories of Davison Chemical Co., Div. W. R. Grace & Co., described the proposed reorganization of sample work; and C. H. Perrin, research chemist of Canada Packers, Ltd., Toronto, talked on means of determining accurately the moisture content of fertilizers. The subject was elaborated upon further by W. L. Hill, USDA, Beltsville, Md.

A report on collaborative study of spectrophotometric methods of analysis of triple superphosphate was presented by W. N. Hoffman, USDA, and H. L. Marshall, Olin Mathieson Chemical Corp., led a discussion on intermittent or continuous shaking in the procedure for determination of insoluble P_2O_5.

John A. Brabson, TVA research branch, Wilson Dam, Ala., in his talk "Are We Willing to Pay the Piper?" said that there are still many areas of chemical control where improvements might and should be made, but such innovations are sometimes costly and therefore set aside.

The meeting was held at the Shoreham during the week of sessions by state control officials for feeds, fertilizers and pesticides, and also the annual meeting of the Association of Official Agricultural Chemists.

WELCOMED TO U.S.—N. V. Gopinath, first Indian engineer to represent his country's chemical industry in the U.S. under the technical assistance program of the International Cooperation Administration, is welcomed by Frank G. Breyer, of Singmaster & Breyer, New York. Mr. Gopinath is superintendent of the chemical control division of Fertilizers & Chemicals (Travancore), Ltd., picture of which hangs on wall in background. The Indian plant was designed by Singmaster & Breyer.

Bacterial Blight Top Iowa Soybean Enemy

AMES, IOWA — Bacterial blight was the plant disease most frequently affecting Iowa soybeans in 1958, plant pathologist J. M. Dunleavy said at Iowa State College.

Sixty-four percent of the fields included in the first of two summer surveys were infected with blight. This was a drop of 8% from the previous year. Forty-nine percent of the affected fields showed large yellow halos on the leaves of infected plants. Development of such large halos was unusual. It caused a short delay in plant development.

Hawkeye soybeans were grown in more than half the fields visited in the survey. Only 8% of Hawkeye fields showed halos. In fields planted to other varieties (Blackhawk, Chippewa, Harosoy, Lincoln, Adams and Clark) 23% of the fields had halo markings.

The survey indicated root rots were only half as prevalent in 1958 as in 1957. Thirty-six percent of the fields in this year's study were infected with root rot. Seventy-two percent were damaged a year ago. Almost all of the rot was fusarium rot. It caused particularly heavy growth depression in northwest Iowa where small, fibrous roots of plants were killed.

Downy mildew was well established in Iowa in 1958, except in the west central portion. Mr. Dunleavy said this disease didn't cause any leaf losses.

The second survey, taken in September, indicated stem canker and brown stem rot also were present in Iowa bean fields. Stem canker was observed in 51% of the fields, an increase of 18% over last year. Brown stem rot was found in 20% of the fields as compared to 15% in 1957.

ANNUAL WINTER MEETING

WOOSTER, OHIO—The Ohio Pesticide Institute will hold its annual winter meeting at the Neil House in Columbus, Ohio, Jan. 12-13, announced J. D. Wilson, secretary of the Institute.

'Freedom for Agriculture' Theme of California Meet

SAN JOSE, CAL. — "Freedom for Agriculture" will be the theme of the 40th annual convention of the California Farm Bureau Federation scheduled to begin here Nov. 9. Headquarters for the five day convention will be the St. Claire Hotel.

The federation's conference of the deciduous fruit department will include a 10:00 a.m. meeting Nov. 10 on "Biological and Compatible Control of Pests." Ray Smith, department of entomology, University of California, will speak on "Compatible Controls," and James K. Holloway, U.S. Department of Agriculture, will discuss "Change Parasite Introduction Investigations."

At the same meeting, Clarence S. Davis, associate agriculturist at the University of California, will speak on "Field Experience with District and Cooperative Control Efforts."

The field crops department will meet at 2:00 p.m. the same day. "Development of Weed Control" will be the topic of W. A. Harvey, extension week specialist at the University of California. Following Mr. Harvey's speech, sections will report on rice, alfalfa and beans.

Spotted Alfalfa Aphid On Move in Washington

PASCO, WASH. — The spotted alfalfa aphid has been observed in Franklin County, reports Roy Deming, county agent. Previously it was located in Washington's Benton and Walla Walla counties, and in some Eastern Oregon counties.

Advising farmers to keep open a sharp eye for the bug, Mr. Deming pointed out it has caused an estimated $5 million crop loss in California. It has six rows of black spots on its body.

Diazinon Approved for Some Vegetables, Fruits

YONKERS, N.Y.—Snap beans, cucumbers, onions, figs and hops join the list of crops that have received approval for the use of Diazinon, reported Geigy Chemical Corp. of Yonkers. Residue tolerances for Diazinon to date have been established on a large number of vegetable and fruit crops.

RUST ON KANSAS WHEAT

MANHATTAN, KANSAS—Considerable rust is being reported on early planted and volunteer wheat in central and western Kansas. Claude L. King, extension plant pathologist at Kansas State College, says this has been identified chiefly as leaf rust, with a trace of stem rust, by C. O. Johnston, federal rust authority stationed at K-State.

PRESIDENTS

(Continued from page 2)

George F. Leonard

changing conditions of the times. These pressures were brought on by the extensive and continuing development of many newly developed materials, ever-expanding fields of economic use, and increased world demands.

Corollary to the development and potential economic usages of these new organic chemicals, the industry was also confronted with a challenge to know its own products better. Likewise, we had to be certain that farmers were provided with full knowledge of how to employ the materials to obtain increased profits, high yields and improved quality, thus proving the economic value of effective pest control.

It was this challenge that prompted me in my first presidential address to suggest to both the "brass" and their associates to "get your shoes dusty." In short, to get acquainted with the farmer out in the field and at the end of the row, which is the actual and deciding market place for the industry's product.

Anyhow, I did not get thrown out and many in the trade still refer to me as "dusty shoes."

To enumerate a few of the highlights of the period:

The first extensive use of airplanes for emergency applications of pesticides took place in 1946.

The Insecticide, Fungicide and Rodenticide Act of 1947 was passed. A tremendous amount of work was involved in the preparation of this act all during the period. The understanding collaboration between government and industry was measurably strengthened and continues to the betterment of all related phases of agricultural production.

Subsequent to receiving proposals for state distribution of scarce industry products, pesticide shortages were surveyed in all areas of interest by the association. Fine cooperation among manfacturers defeated the threat of the state distribution.

The first NAC meeting with radio farm directors was held in 1948. This project proved to be most rewarding for the dissemination of factual and helpful information. About this time, too, the cooperative promotion program with USDA was begun for full scale state pest control as an aid to the problem of adequate food supply for the post-war world.

The need for more comprehensive public relations and safety program was recognized by all and this phase was measurably expanded in 1948. This direct association relationship with World Food Organization and UN agencies was developed in 1949.

And then in the summer of 1949, came the "big move." With the decision to move the headquarters from New York to Washington, not the least of the moving problems was the question of what to do with the six big black office chairs, which, for the sake of economy, were moved too. However, they were later set aside as they somehow did not harmonize with the plush appointments featuring the new Washington locale!

Indicating the ever-broadening scope of the association activities, the name of "AIF" was changed to "NACA." At least the new name eliminated the hecklers from the oft-repeated phrase to the association as the "All-In Fun" boys!

In conclusion, during my 38 years in our industry, the privileges and honor of serving as your president will always be cherished! May the NAC continue to grow and serve!

State Regulations, Other Restrictions Appear on Horizon

By Ernest Hart
President, Food Machinery & Chemical Corp.
San Jose, Cal.

ASSN. PRESIDENT 1949-51

IT WAS at the 16th annual meeting of NAC in 1949 that I was first elected president. Economic conditions in the pesticide industry were reasonably good during this period, but our industry was faced with many problems and with many opportunities to expand the usefulness of our services.

We were fortunate in having a very strong staff group and a very strong board of directors and with these two it was at once determined that we would vigorously attack our problems and at the same time embrace the many opportunities that presented themselves.

Following are some of the highlights of our activities during my administration which may be well remembered by people in the trade:

1. Unauthenticated and derogatory press reports regarding dangers facing humans who used food crops which had been sprayed or dusted with poisonous pesticides were causing unrest both with consumers and in Congress. A campaign was immediately undertaken through various public relations efforts in many categories to present the true facts to all interested parties. Our technical staff and expert industry committee accomplished a difficult but effective job.

2. The spray and dust residues on food products were being explored in Congress as well as in some of the interested government departments. Legislation was being prepared to establish tolerance levels for pesticides used on food products. A major effort in this area was directed at being of assistance wherever possible to all of those involved and important results were secured in getting this program off in a manner reasonable to the industry and entirely in the public interest. The basic elements of these regulations with respect to residues are still in effect.

3. Airplane application of pesticides to crops was beginning to grow rapidly in the field and this activity presented many problems to the industry. Sloppy and unskilled applications resulted in lack of proper control or, on the other hand, damage to the crops adjacent as well as to those being treated. The result was a rash of complaints by farmers and a rash of liability damage claims against the applicator and the company which furnished the material.

A campaign of education and cooperation was undertaken to improve this situation. I took a very active part including speeches at various group meetings in critical areas. This campaign was sufficiently successful so that today treatment by airplane has become an accepted and successful practice in applying pesticides.

4. We engaged in a serious effort to gain the respect and good will of the Food and Drug Administration and to this end persuaded Dr. Dunbar, then head of Food and Drug Administration, and Tom Burrows also of this Administration, to speak at our meetings and otherwise work with us toward better mutual understanding.

Similarly, we undertook to establish communications with the U.S. Public Health Service; the Department of Health, Education and Welfare, USDA, and many state law enforcement agencies as well as experiment station workers. This policy resulted in a broad knowledge of our industry by these people and a large measure of mutual respect and cooperation resulted.

5. Important liaison activities were established with the American Chemical Society and one of our staff became a member of a new subdivision on Economic Poisons of the A.C.S. This liaison is still in effect but is now known as the Pesticide Subdivision of The Division of Agriculture and Food Chemistry.

Also, during this period the National Academy of Sciences, Food and Nutrition Board established a committee to investigate the use of chemicals in or on food products. Our association was given an opportunity to serve on a pesticide sub-committee and still does.

6. With the introduction of many new pesticides through the research and development activities of our members it became desirable to establish a line of communications with the American Medical Assn. Our first guest at one of the meetings, from the American Medical Assn., was Dr. James Wilson. This initial effort has been continued up to date.

7. Product liability became a major problem during my administration especially because of the introduction of many new pesticides and herbicides by the industry and because of the tremendous growth of the uses of these materials in agriculture our company members were faced with an increasing number of product liability claims and suits. To assist in preventing unwarranted claims we developed a liability manual for the use of our members which is still in use and has been effective in reducing claims.

8. State laws regulating the use of pesticides were being presented to the State legislatures throughout the nation, thick and fast. These provided for heavy state registration fees and restrictions untenable to the industry. Much time and effort was spent to assist the various states in developing regulatory laws which would not conflict with the Federal laws and to confine the provisions of such laws to such elements as would make the pesticide industry operable but still be in the public interest. Much success was achieved in this field.

9. During 1949 there was an actual shortage of pesticides available for use on the crops of that year. This situation induced the government to consider stockpiling; however, by a vigorous program within the industry to make materials available to government agencies and others during emergencies, we were able to satisfy the situation without the necessity of government stockpiling and from that time forward there has never been a shortage of our industry material.

Ernest Hart

10. I should mention the efforts of Art Mohr, president of California Spray-Chemical Corp., who assisted materially in bringing about a reorganization of the Pacific Insecticide Institute, now known as the Western Agricultural Chemists Assn. This maneuver had the effect of solving many of the problems which at that time existed between the two groups.

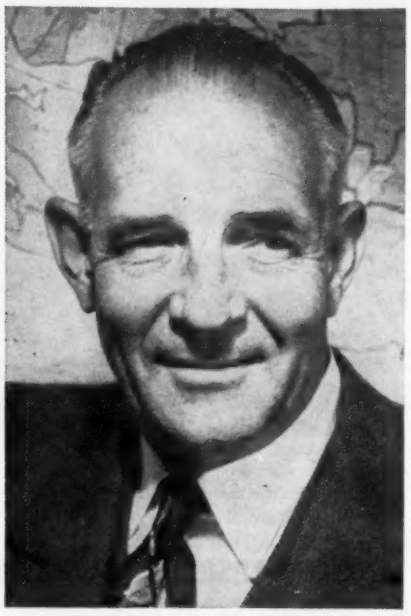
11. With the development of the Korean "police action" an industry defense production committee was established with John Rodda as chairman. Our staff and this committee worked with the National Production Authority and through its work we were able to solve all major problems involving raw material and distribution to the satisfaction of everybody concerned. During this period industry statistical reports were initiated through the Second National Bank of Washington which under a code system reported production and inventory of certain important items. I understand that this practice has been discontinued, which is to be regretted.

12. Our members gave willingly of their best talent to strengthen our various committees and the work done by these committees during that time is still being felt in the affairs of the association. Also, we greatly increased the quality and numbers of our staff group.

The preceding mark the highlights, but reference to these years would not be complete without mention of one of the most interesting and best friends that our association ever had: Dr. S. A. Rohwer of the U.S. Department of Agriculture. For many years he made scores of important contributions to the effectiveness of our association work and his presence at our various meetings was always a happy occasion. It is my impression that he knew the best and worst of all of us who were attempting to develop a better industry base from which to serve agriculture. Unfortunately, Dr. Rohwer passed away during my administration and his loss has been keenly felt by all of those who had an opportunity to be associated with him.

Of course, during these years there was also the lighter side of things induced by our association and committee meetings. A small sized book could be written concerning these activities but I must refrain from it so as "to protect the innocent." Suffice it to say that in spite of the prodigious amount of serious work involved in our activities we still had time for play and especially our more mature and experienced masters of this art were given full opportunity to vent their inhibitions—always orderly but very hilarious. Those of the old guard who happen to read this can well know what I mean.

Good Year, Then Bad One Recalled For 1951-1953



By Arthur W. Mohr
President, California Spray-Chemical Corp.
Richmond, Cal.

ASSN. PRESIDENT 1951-53

MY TERM as president of NAC began in September, 1951, which was probably the best year that the insecticide industry has ever enjoyed. All members of the industry were happy and jovial over the good times and were hopefully looking toward their continuance.

During the following few months one announcement after another was made about the completion of additional plants for making the various basic chemicals of our industry. It very rapidly became apparent that there was far too much production coming into the market for the 1952 and following seasons. As might very well be expected, the scramble for market place by the new companies entering the picture brought about drastic reductions in price and, consequently, profits.

So at the annual meeting in 1952, faces were much longer than they had been the year before. The change from good times to bad was very rapid, and contrary to the general economy of the country which was progressing satisfactorily.

During my second year of office, things didn't improve, and I expect that the performance of the industry hit an all-time postwar low. I rather suspected that this might affect the attendance at the 1953 annual meeting, but was surprised to find a bigger crowd than ever, regardless of the economics of the industry. It seemed to be the consensus of many present that the big turnout was to find out if everybody was having the same pains and possibly what might be done about it.

So I might sum up my two years' experience by saying that during that time the industry went from its highest peak to its lowest point, which I hope the industry does not feel was a responsibility of the president of the association!

Counteracting Bad Publicity Recalled In Past Years, Too

By Paul Mayfield
Vice President, Hercules Powder Co.
Wilmington, Del.

ASSN. PRESIDENT 1953-54

I CANNOT jot down reminiscences of my term as president without thinking of some of the things which have happened during my many years as a member of NAC. I recall vividly my first meeting at the Westchester Country Club when Grub Leonard proved to be the "Poet Laureate" of the industry. He quoted from everyone, including Shakespeare and Kipling. Speaking in a style that out-Churchilled Churchill, Grub did have a message for the industry. He exhorted us to know and to understand our customers and their problems and most important of all: "Walk down the dusty road with the farmer."

No better advice has ever been given in this industry, and judging by the strides that have been made since, no advice has been better accepted. The pesticide industry today, from its executives to its salesmen are walking down the dusty road with their good friends, the farmer and the growers.

Because we have sought to understand the farmer's problems, and defined our responsibilities as manufacturers, we have achieved and maintained a harmonious relationship that compares favorably with the atmosphere in which many other successful industries operate.

During my term as president, I had the occasion to become much better acquainted with most of the members throughout the country. The problems which occupied my attention have also occupied the attention of more than one NAC presidential administration. Projects such as the Miller Bill; the everlasting job of counteracting unfavorable and "scare" publicity; the recognition that the industry needs a solid profit basis to permit it to survive and grow, and the product liability problem, were some of the things which were with us then and are still with us.

During my term, professional entomology in America celebrated its one hundredth anniversary. The Pink Bollworm Research Center at Brownsville, Texas, was dedicated and the

Paul Mayfield

first meeting of the Canadian Agricultural Chemicals Assn. was held in Toronto. The NAC was represented on all of these occasions.

In that year, also, NAC "invaded" Texas and held a barbecue outside Houston. (You might remember, we also had a good business meeting.) I still have the badge that was presented to me as Deputy Sheriff by the Harris County Mounted Posse to prove that I was on hand at that occasion also.

My year as president and my work with the Association, although time and energy consuming, was a happy and rewarding year. One of the rewards was a beautiful and useful tray presented to me by the Association at the end of my term. I was particularly touched and somewhat surprised by this since I had expected nothing more than a Goose for Christmas. I have never, however, lost sight of the fact that it was an honor and a privilege to serve and my interest in the present-day problems of the industry is as keen as it was when I was in office in 1953.

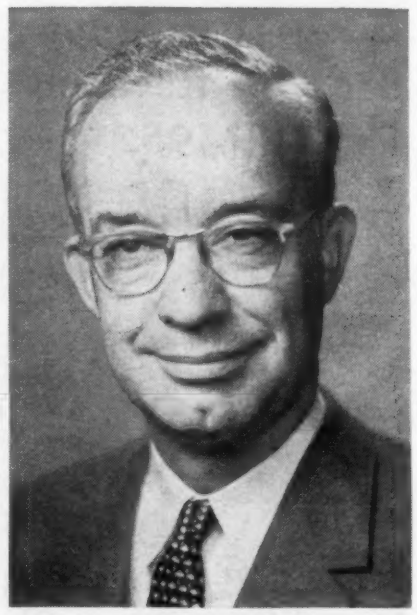
Continued good leadership throughout NAC's 25 years has carried us far as an Association and as an industry. But, most significant, has been the ability of that leadership to encourage individual companies to recognize voluntarily, and in cooperation with federal, state, local, and accredited professional agencies, a moral as well as economic responsibility to produce and distribute agricultural chemicals for serving mankind.

Passing of Miller Bill Big Event of This Office Term

THE PRESIDENCY of the National Agricultural Chemicals Assn. affords a box seat from which can be viewed one of the most dynamic industries of our economy. It is a gratifying thing to watch member companies—aggressively competitive in marketing on one hand—band together to work out common problems to the best interest of the industry, the farmer, and last but most important, the public.

My term in office is perhaps most memorable since it included the first year that the agricultural chemicals industry operated under the Miller Amendment to the Pure Food, Drug and Cosmetic Act. This bill gave official recognition to the practice of protecting users of agricultural products. Industry has long followed practices much like those now required under the law, and good farmers have always observed the limitations that are now mandatory.

But during the transition period of learning to live under the new law, we were striving to understand the problems and the objectives of the government agencies involved. At the same time we needed to make them appreciative of our own problems and those of the farmer. This new law placed stringent new requirements on



By W. W. Allen
Manager, Agricultural Chemical Sales
Dow Chemical Co.
Midland, Mich.

ASSN. PRESIDENT 1954-55

the industry and there was an enormous educational job involved in helping the industry to work under the provisions of the Miller Bill. The NAC Assn. did a topflight job for us and we had clear guidance where confusion could have reigned. By working together with government administrators in a spirit of understanding, the operation of the new law began with a minimum of stress and strain.

A near, but older, relative of the problem under the Miller Bill, is in NAC's continuing legislative program offering aid to states in drafting and interpreting useful and workable laws governing agricultural pesticides. Often the interests of one group of farmers seem to conflict with those of another. There is always the question of overly cautious laws denying the practical use of a valuable pesticide to farmers.

Manpower of NAC's Washington office was increased in 1956, making it possible for an even stronger legislative program to lead the way toward laws benefiting the public, the farmer and the industry to the greatest possible extent.

The herbicide committee was established during my period in office to deal with problems specific to weed and brush control products. How well they performed is attested by the fact that this temporary group has been absorbed as a permanent committee of the organization. More important is that this expansion to include herbicides is typical of the rapid growth and maneuverability of NAC and the industry to produce better and less costly food for the public.

The safety committee was instituted to enhance the strong programs of member companies since the safe use of agricultural chemicals is paramount and is essential to effective use. There seems to be an element of mystery involved in the use of agricultural pesticides: they work silently and almost invisibly. But these characteristics need not make them an object of fear, nor do they make them necessarily dangerous. The pesticide industry is on a wise program to make the safe use of agricultural chemicals understood throughout the nation.

At the close of my term as president of NAC, I made two predictions of the agricultural chemical industry: rapid growth and greater public understanding. Steadily increasing sales figures and the volume of valuable new products on the market attest to this growth. Public understanding is a little more difficult to measure, but perhaps a recent editorial comment by Glen Buck, publisher of the Colorado Rancher and Farmer is significant:

"For a number of years it was the engineers who had the most to do

(Turn to PRESIDENTS, page 17)

Special Merchandising Section

Better Selling

Marketing News and Features

Quick, Easy Inventory Plan For Farm Store Operation

By Jack Bedford

You can have an easier, faster, and more complete and more accurate inventory in your farm store by adopting this four-step program:

1. Organize
2. Deputize
3. Supervise
4. Analyze

Each step is logical. Together they cover your physical inventory completely. And, adopted for your business inventory, you will find this dreaded chore is completed quicker and easier.

1. ORGANIZE

First in your organization you will want to set a time for your inventory. Many dealers take inventory on Dec. 31. This is the traditional time, but you may find your inventory will be quicker and easier if you select a time when your stock is low. Errors can be kept at a minimum if inventory is scheduled when activity is slow in your store.

A physical inventory held in the evening will avoid confusion. But, the inventory crew may not be as alert as they would be earlier in the day. Sunday is preferred by many dealers because it avoids interruptions and late-evening fatigue errors that may develop. Overtime wages, or compensating time off, should be considered when selecting the day of the week and the time of day for your inventory.

Another phase of your inventory organization will be the selection of forms. Use standard forms. Number serially to check on the completeness of your inventory. Have plenty of forms on hand to complete the inventory without delay or interruptions.

Stock arrangement before the actual count starts will save many duplicate listings in your inventory. Getting the stock in order may take time, but it will avoid inventory errors. And, it may save you plenty of time and customer dissatisfaction later.

Some dealers make advance listings of stock during this pre-inventory stock organization. The listing is completed in detail except for quantity. Then, when the final counting is made the amount is entered on the pre-written inventory sheet and your inventory moves at a rapid pace.

Valuation of your stock is another phase of the inventory organization. As you know, an inventory can be valued at (1) cost, (2) cost of market, whichever is lower, (3) or retail. Check with your accountant to be sure you have the best method of valuation for your inventory taxwise. Then, be sure all stock is priced the same to avoid errors and lost time in your inventory.

2. DEPUTIZE

Work of any kind is easier when it is divided. This is especially true of a physical inventory. In this phase of your inventory plan, you will want to cover four things:

1. Selection of your inventory crew.

2. Careful training of the crew.

3. Developing a team spirit in the crew.

(Turn to INVENTORY, page 11)

NEW SPRAYING DEVICE—This cattle sprayer uses aerosol bombs and will spray an average of 140 head of cattle with one filling of three 12-oz. containers. It costs only about $20 to build and shows promise for use with dairy cattle since it leaves no residue in milk. It was developed by Dr. Tien-Hsi Cheng of the Pennsylvania agricultural experiment station.

New Cattle Spraying Device Developed at Penn State

Biting flies on cattle can be controlled by a new device using aerosol bombs, the latest development of Dr. Tien-Hsi Cheng, zoologist for the agricultural experiment station at Pennsylvania State University.

The device uses three aerosol bombs, activated by solenoid switches connected to a battery. Earlier Dr. Cheng developed a similar electric-eye controlled sprayer attached to a motor. The aerosol bombs are mounted on a doorway or chute through which the cattle pass. As the animal breaks an electric-eye circuit, the solenoid switches set off the aerosol bombs. The average spray time is 1½ seconds per animal.

Cost of building such a sprayer is about $20, a much lower figure than the cost of other sprayers used, Dr. Cheng claims. Cost of the spray used on each animal averages about 1½¢ per application less than the average costs for using other types of sprayers, he adds.

An average of 140 head of cattle can be sprayed with one set-up of three 12 oz. aerosol bombs, Dr. Cheng explains. Amount of spray used varies from ¼ to ⅓ oz. per animal, depending on the size of the spray nozzles used. By using small nozzles, Penn State researchers have sprayed as many as 225 cows with a set of three 12 oz. aerosol bombs.

Dr. Cheng's tests show that beef cattle gain faster on pasture if kept free of biting flies. In tests in Centre County, Pa., he found daily spraying increased the average rate of gain of beef cattle by ½ to ⅔ lb. per day.

The Penn State sprayers are designed to control horse, stable, and horn flies. Like Dr. Cheng's earlier motor sprayer, the aerosol bomb sprayer is consistently effective in controlling horn flies. Further studies on the control of horse and stable flies are in progress.

The new aerosol sprayer may prove successful with dairy cattle as well. Tests with sprays containing toxicants such as methoxychlor show no spray residue in milk. Research with other types of sprayers shows that some spray residue gets into milk. Dr. Cheng is cooperating with Dr. E. H. Frear and Henry F. Enos, Jr., of the department of agricultural and biological chemistry on further studies of toxicant residues in milk.

All parts of the animal are sprayed by the aerosols. About 100 head of cattle can be treated in 10 minutes, once the equipment is set up and the cattle become accustomed to its use. The sprayer avoids panic on the part of highly nervous cattle.

The effect of biting flies on milk production has been studied during the past two years in cooperation with Dr. E. M. Kesler of the Dairy Science Department at Penn State. Biting flies can reduce milk production from 20 to 40%.

Hiring a Key Executive for Your Small Business

By JOHN PERRY

Senior Consultant, Fred Rudge Associates, Inc., New Canaan, Connecticut

Some corporations boast that 99% of their management jobs are filled from within. Others prefer a different proportion, with occasional infusions of experience gained elsewhere. But small firms often have no choice other than to hire, rather than promote. This may be the way you see things in your present situation, and it may be right. But—will others in your organizations see it the same way? Do they feel, as you do, that an outside man is needed Or will he arrive in an atmosphere of resentment and hostility?

Small organizations are usually flexible and adaptable. They have to be, since a single management man may handle jobs which, in a large corporation, would be distributed among several men or even several departments. Naturally, even though your business is small, when a key man leaves he causes some degree of dislocation which is more or less sharply defined. However, as head of the concern, you usually have considerable latitude in the kind of replacement you bring in. The conclusion to be drawn from these facts is that it may make sense to reorganize your management set-up, redistributing present assignments.

In this way, you may find opportunities for using existing manpower more effectively. And, consequently, you may write specifications for the new man less narrowly, widening your range of choice. But don't keep all this to yourself! The more your present associates participate in planning, the more they will feel the decisions made are partially theirs, the more readily they'll accept a newcomer.

In many cases, employees have a definite inclination for an individual from within to replace the key man who has left. Where this occurs, the attitude usually shows up, not only

(Turn to HIRING A KEY, page 14)

What's New...

In Products, Services, Literature

You will find it simple to obtain additional information about the new products, new services and new literature described in this department. Here's all you have to do: (1) Clip out the entire coupon and return address card in the lower outside corner of this page. (2) Circle the number of the item on which you desire more information. Fill in your name, your company's name and your address. (3) Fold the clip-out over double, with the return address portion on the outside. (4) Fasten the two edges together with a staple, cellophane tape or glue, whichever is handiest. (5) Drop in any mail box. That's all you do. We'll pay the postage. You can, of course, use your own envelope or paste the coupon on the back of a government postcard if you prefer.

No. 6820—Soil Conditioner Booklet

A booklet on "Dextran and Dextran Products as Soil-Conditioning Materials" has been prepared by the Commonwealth Engineering Company of Ohio. The illustrated publication contains data on dextran-treating experiments, plus tables, graphs and photographs of actual tests. For more details check No. 6820 on the coupon and mail to Croplife.

No. 6812—Manufacturers' Handbook

A "Manufacturers' Handbook" which was designed as a technical reference text for students and teachers is now available from Nitroform Agricultural Chemicals. Charts on nitrification are included to aid in understanding of the chemical and agronomic properties of good ureaforms. Check No. 6812 on the coupon and mail.

No. 7175—Gas Equipment Brochure

A description of the line of packaged inert gas producing equipment manufactured by Southwest Industries, Inc., is contained in a four-page brochure published by the company. In it are included inert gas generators, nitrogen generators, carbon dioxide generators, carbon dioxide removal units, gas purifiers, gas drying equipment, and compressors and storage systems. These units are used in a large number of industries, including grain storage. Check No. 7175 on the coupon and mail it to secure the brochure.

No. 6817—Suspension Material

Carbopol, a material which will suspend particles in a solution, has been announced by the B. F. Goodrich Chemical Co. The material can be used in various herbicides and other agricultural wettable powders. According to the company as little as .05% Carbopol, based on the weight of the total mixture, will retard settling and eliminate the formation of a hard cake. Its use for suspension in insecticides, herbicides and fungicides eliminates the need for repeated shaking. In addition, the company claims, Carbopol acts as a binder to adhere the particles to the foliage. Check No. 6817 on the coupon and mail for details.

No. 6816—Testing Machine

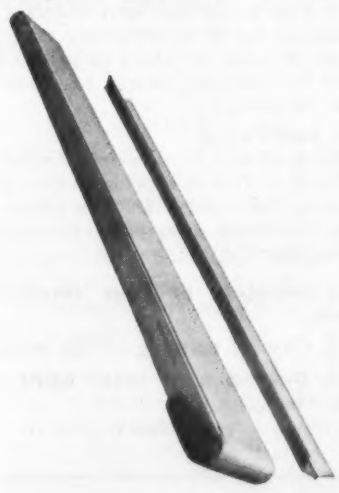
Kohl Enterprises, Inc., Aquafil Division, announces a specially designed arbor press, in combination with a mechanical force gauge, for testing the compression of a given sample of fertilizer. After breaking the same sample, the machine will check the anti-caking ability of the sample over long time storage. For further details, check No. 6816 and send to this publication.

Also Available

The following items have appeared in the What's New section of recent issues of Croplife. They are reprinted to help keep retail dealers on the regional circulation plan informed of new industry products, literature and services.

No. 7169—Belt Conveyor

A new conveyor is being marketed under the name of Porta-Veyor by Bunke-Musser, Inc. The drive unit of the equipment is completely enclosed in the conveyor, eliminating chain drives and guards on the outside. It can operate flat on the ground and up to a 30 degree angle. It is being manufactured in a variety of



lengths and belt widths, and has a load capacity of 400 lb. Belt speeds can be adjusted to as low as 15 ft. per minute. Literature and prices are available by checking No. 7169 on the coupon and mailing to Feedstuffs.

No. 6805—Tree Control Bulletin

Michigan State University is offering information on controlling insects and disease on ornamental trees. The bulletin was compiled by the entomology, horticulture and botany and plant pathology staff members at MSU and it lists descriptions of pests and their injuries on about 25 different trees. Recommendations for kinds of control materials to use are also included. Interested persons may write to the Cooperative Extension Service Bulletin Office, Michigan State University and ask for bulletin No. E269.

No. 6813—Revised Products List

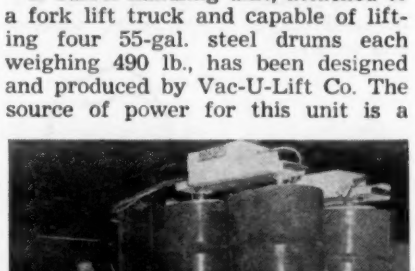
A newly revised chemical products list titled "Hooker Chemicals," has been published by Hooker Chemical Corp. The bulletin contains five chemicals which have recently been made available for general sale on a commercial scale. A description, chemical formula, physical data, uses and types of shipping containers are detailed for each of the 65 chemicals listed. Check No. 6813 on the coupon and mail for details.

No. 6815—Trailer Sprayer

Simplicity, large capacity, low cost and versatility were the features Tryco Manufacturing Co., Inc., says it has tried for in the firm's 1959 line of fertilizer sprayer equipment. The trailer sprayer has a 300 gal. steel tank, 1¼ in. PTO pump system and a 33 ft. stainless steel boom assembly. For more details, check No. 6815 on the coupon and mail to this publication.

No. 7193—Vacuum Barrel Handler

A barrel handling unit, attached to a fork lift truck and capable of lifting four 55-gal. steel drums each weighing 490 lb., has been designed and produced by Vac-U-Lift Co. The source of power for this unit is a



hydraulic, motor-driven vacuum pump which operates in conjunction with the regular hydraulic system of the fork lift truck. Each unit is equipped with a dashboard panel control which allows operators to lift or release up to four barrels collectively, individually or in any combination. Check No. 7193 on coupon and mail to secure more details.

No. 6803—Air Shipments

ParcelAir, a method of shipping fertilizer and farm chemicals by air with one to three-day service, has been started by American Shippers, Inc. The service will ship packages of any dimension up to 40 lb. anywhere in the U.S. For further details check No. 6803 on the coupon and mail it. Please print or type name and address.

No. 7165—Bagging Scale Bulletin

The Richardson Scale Co. has published a bulletin describing its E-50 automatic bagging scale. The six-page, two-color bulletin, with illustrations and cut-away line drawings, details the E-50's design, capacities, gravity or power feed operation, and discharge. In addition, the bulletin contains engineering drawings, illustrations of suggested feeding arrangements and descriptions of accessories. Standard specifications and optional features are outlined, along with the E-50's ability to handle a variety of materials. A copy of the bulletin may be obtained by checking coupon No. 7165 and mailing to Feedstuffs.

No. 7118—Bagging Scale

Burrows Equipment Co. has announced a new bagging scale. Known as Model No. 700, the scale occupies an area 18 in. square. It can be at-

Send me information on the items marked:

- ☐ No. 6795—Product News Sheet
- ☐ No. 6797—Tractor-Shovel
- ☐ No. 6803—Air Shipments
- ☐ No. 6805—Tree Control Bulletin
- ☐ No. 6810—Pesticides Book
- ☐ No. 6811—Turfgrass Manual
- ☐ No. 6812—Manufacturers' Handbook
- ☐ No. 6813—Revised List
- ☐ No. 6814—Pump Data
- ☐ No. 6815—Trailer Sprayer
- ☐ No. 6816—Testing Machine
- ☐ No. 6817—Suspension Material
- ☐ No. 6820—Soil Booklet
- ☐ No. 7118—Bagging Scale
- ☐ No. 7165—Scale Bulletin
- ☐ No. 7169—Belt Conveyor
- ☐ No. 7175—Equipment Brochure
- ☐ No. 7186—"Tare-Out" System
- ☐ No. 7191—Trough-Belt Conveyor
- ☐ No. 7193—Vacuum Barrel Handler

(PLEASE PRINT OR TYPE)

NAME .....

COMPANY .....

ADDRESS .....

CLIP OUT—FOLD OVER ON THIS LINE—FASTEN (STAPLE, TAPE, GLUE)—MAIL

FIRST CLASS
PERMIT No. 2
(Sec. 34.9, P. L. & R.)
MINNEAPOLIS, MINN.

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Croplife

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Reader Service Dept. Minneapolis 40, Minn.

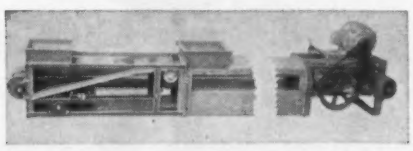
tached quickly to a feed mixer, bin or hopper, and it will bag at the rate of six to eight bags a minute and the bag clamp is designed to hold paper, burlap or cotton bags of 50 to 100 lb. capacity. The weigh beam is built into the back of the scale. For details, check No. 7118 on the coupon and mail it to Croplife.

No. 7186—"Tare-Out" System

A new automatic "taring-out" system makes it possible to fill a variety of containers with exactly the same amount of material each time, regardless of the weight of each container, it is claimed by officials of the Richardson Scale Co. Centered in a well-mounted panel are the controls for positioning a container on the weigh platform, dialing in the desired weight, taring-out the weight of the container, delivering the material and removing the filled container. Now in operation weighing from 94 to 259-lb. amounts of cement-impregnated wood fiber into steel forms which vary in weight from 300 to 370-lb., this system has a normal speed of two cycles per minute. Weighing smaller quantities, the speed would be considerably increased. Check No. 7186 on the coupon and mail it to secure details.

No. 7191—Trough-Belt Conveyor

The Universal Hoist Co. announces a new conveyor designed for all fine free-flowing material in capacities up to 2,750 cu. ft. per hour. The con-



veyor has a 12-in. belt which is pulled through a formed steel trough at up to 500 ft. per minute. Called the Model K, it has a reversible motor and can be run in either direction. More details can be obtained by checking No. 7191 on the coupon and mailing it. Please print or type.

No. 6795—Product News Sheet

"News Briefs on the Creative Use of M & C Process Materials" is a regular publication of Minerals & Chemicals Corporation of America. The publication contains information about the uses of the company's mineral products for varied industrial purposes. Check No. 6795 on the coupon and mail it to Croplife to secure details.

No. 6810—Pesticides Booklet

"Your Ready-Reference Guide to Dependable Diamond Weed and Brush Killers for Effective, Easy, Economical Weed and Brush Control" is the title of an illustrated, 12-page booklet just issued by the Diamond Alkali Co. Briefly reviewed in this catalog are the Crop Rider, Fence Rider, and Line Rider groups of Diamond herbicide formulations. Application areas suggested in the booklet include farms; highways, secondary and rural roads; public utility lines; railroad, pipeline and other rights-of-way, and factory sites, plant grounds and other industrial areas. Check No. 6810 and mail for details.

No. 6797—Tractor-Shovel

The Frank G. Hough Co. has announced a new four-wheel-drive, rubber-tired tractor-shovel with 7,000 lb. carry capacity, the model H-70. The loader will replace the model HH Payloader. Company officials say that features of the new H-70 include more power, more traction, stronger components, greater protection against dirt and dust, more efficient torque-converter, complete power-shift transmission, power-transfer differentials, power-steering, pry-out bucket action, safety boom arms, power-boosted brakes and numerous refinements. New gasoline and diesel engines provide from 105 to 110 h.p. Diesel engines are available in either 2- or 4-cycle types. Secure details by checking No. 6797 on the coupon and mailing it to Croplife.

No. 6811—Turfgrass Manual

A guide to fertilizing various turfgrass areas, entitled "Superintendents' Turfgrass Manual" has been published by Nitroform Agricultural Chemicals. The booklet contains a chart on the "Range of Nitrogen Feeding" and also information on supplemental feeding. For details, check No. 6811 and send to this publication.

No. 6814—Adjustable Pump Data

Operating data on the ACAP pump for handling liquids or hygroscopic solids in suspension under variable capacity and head requirements are contained in new literature released by Allis-Chalmers. Standard requirements of the ACAP pump as compared to a standard pump with valve controlled discharges are noted in the bulletin, which includes range and power savings charts. For more information, check No. 6814 on the coupon and mail.

J. C. Tanner Promoted by American Crystal Sugar Co.

DES MOINES, IOWA—J. C. Tanner is the new agricultural superintendent of the American Crystal Sugar Co.'s Mason City factory district, A. G. Quamme, district manager, announced.

He succeeds G. E. Claassen, who was transferred to Crookston, Minn., as agricultural superintendent.

Mr. Tanner comes from East Grand Forks, Minn., where he was in the research department of the company. He also managed the company farm, conducted commercial fertilizer tests for the improvement of yield and quality, carried on crop rotational projects and made a study of green manure on productivity of crops.

Insect Control Meeting Set

STATE COLLEGE, MISS.—The Fifth Annual Insect Control Conference has been set for Jan. 7-8 at the Mississippi State University campus, here.

INVENTORY

(Continued from page 9)

4. Fixing responsibility for the inventory jobs.

You may have enough people in your store to have the regular men handle the inventory. However, if you call in others, you will want to be sure that they are mentally, morally and physically qualified for an inventory.

Training the inventory crew will include the way to use the forms—how to list, what to list, where to count, etc. You may find it helpful if you sell the importance of taking a correct physical inventory to the men selected for this job. Rules you want followed during inventory should be covered in the training period before inventory starts.

Team spirit makes the work seem easier and avoids any slow-down tactics. Selecting men for each counting and listing team who work well together will go a long way in making the spirit high during your physical inventory.

Some dealers assign certain sections of the store to certain individuals to count and list. These people are responsible for completing this work quickly. Errors that are discovered are charged to these people.

3. SUPERVISE

Spot checks made of the physical inventory will uncover some errors in counting and listing. And, even more important, this spot checking will have a tendency to keep all of the crew on their toes during inventory.

During the extension of the inventory, you may want to check certain items to be sure the math is correct. One error uncovered during a spot check of the extensions will make the people more careful in their work.

Another thing that can be supervised in a physical inventory is the way the men are counting. Some men will take time to count all of a small, low-priced item when a good guess would be within a few cents of the correct amount. On the other hand, there are some who will guess at anything . . . regardless of the value of the stock or the amount on hand.

Good supervision of a physical inventory includes some effort to keep the spirit of the inventory crew high. A few coffee breaks during the long hours of counting will actually save time in the long run. Compliments on the speed being made, the accuracy of the counting, or the legibility of the listing will give the inventory crew a shot in the arm.

4. ANALYZE

One way a store inventory is analyzed is in comparison with the stock control system. Some items may show they are in long supply, and the physical inventory reveals the stock is completely gone. It will keep your stock balanced if it is analyzed after the counting has been completed.

Shortages or overages may be uncovered during the physical inventory of your store. When this fact is revealed, it is an indication that something is wrong with the control. This may indicate honest mistakes or there may be some dishonesty in the business. In any event, an analysis of the inventory will provide a starting point to eliminate this type of profit robber.

Old stock may come to light during the inventory. Some dealers make separate listings of this old stock and work out a plan of liquidation after the hectic days of counting and listing are over. This old stock check can be used to your advantage in getting the value of your inventory in line with current prices of this stock.

Buying plans for your business can be developed in your inventory analysis. Items that are out of stock or in short supply will be revealed and can be ordered. Merchandise that is overstocked can be spotted and marked for a stop order basis until the overstock is reduced.

Any way you look at it, inventory is a chore; but this four-step program will help you complete it quicker and easier . . . and the results will be complete and accurate.

HOOKER REPORTS GAIN

NIAGARA FALLS, N.Y.—Hooker Chemical Corp., in its comparative statement of consolidated income issued Oct. 1, reported a 1958 third quarter increase of 3.6% in net income after federal taxes over the third quarter of 1957, and comparative sales off only 1%. Net income after federal taxes for the three months ended Aug. 31, 1958 was $2,532,600 compared with $2,444,600 for the same period in 1957.

New England News Notes

By GUY LIVINGSTON
Croplife Special Correspondent

A resolution condemning the misuse of chemical sprays to kill insects, weeds and plant diseases was passed by a nearly unanimous vote Oct. 7 after a warning from Massachusetts State Natural Resources Commissioner, Francis W. Sargent, that the problem was of "growing concern throughout the nation."

The resolution was adopted at the close of a two-hour public discussion attended by nearly 200 persons at the Museum of Science in Boston. Present were representatives of state and local governments, farm organizations and conservation groups. Mr. Sargent said that an "appalling amount of chemicals" is now being used, some by untrained people, in attempts to control insects, weeds and fungus diseases of plants.

No one has adequate knowledge of the long term effects of the use of these chemical products "on the wildlife and perhaps even people," he commented. Mr. Sargent reported he formed a voluntary group to coordinate the chemical spraying plans of several departments within the state after discovering that one agency had already sprayed an area that was about to be sprayed by a second. A third agency had planned to spray the same area soon, he said.

Sole opposition to the resolution came from the Farm Bureau Federation. Carlton Pickett, its spokesman, said, "A large part of the state's agricultural industry depends on toxic and non-toxic sprays for its very existence" and that "farm operators" are experts in the care, handling and application of chemicals in their war against pests and fungus diseases."

Caterpillar Outbreak

An outbreak of orange striped black caterpillars has been attacking oak trees in South Country for three weeks, Alvin Lannon, chief of the Rhode Island State division of entomology and plant industry, said at Providence, R.I.

Mr. Lannon said that normally, the caterpillars are held in check by parasites who eat their eggs. This year, he said, there are fewer parasites. An unprecedented outbreak of the caterpillars has been reported in Connecticut.

Dam Completed

Connecticut River Valley farmers are a "giant step" closer to freedom from devastating floods with the dedication of Otter Brook Dam at Keene, N.H. The $4 million dam on which construction began two years ago, climaxed 20 years of debate and disagreement, said New Hampshire Sen. Styles Bridges, who made the dedication speech. The disagreements, he said, were literally wiped out in the 1955 flood of the Connecticut River

The Otter Dam project is the second completed since the 1955 floods. The first was the Barre Falls Dam on the Ware River in Barre, which was dedicated last May. The new dam is capable of holding back 6 billion gallons of water and is designed to hold down flood damage along the Connecticut Valley in New Hampshire, Vermont, Massachusetts and Connecticut.

Potato Production

New England potato production in 1958 was estimated at 45,527,000 cwt. as of Sept. 1, the U.S. Department of Agriculture Marketing Service reported in Boston. Apples have also increased.

The prospective potato crop is 9% larger than that of 1957 and 15% larger than the eight-year (1949-56) average production of 39,619,000 cwt. The department also reported a Sept. 1 estimate of apple production of 7,825,000 bu. or 3% more than in 1957 and 14% larger than the 10-year average production.

Dutch Elm Disease

The fight against Dutch elm disease still goes on in Massachusetts. Latest reports from state entomologists are that the elm bark beetles have built up an enormous population. "Dutch elm disease was very serious this summer," they said, "and it may be even worse next year."

They advised spraying with DDT early next spring, prune out and burn all diseased and dying wood. "There are two generations of elm bark beetles, which transmit Dutch elm disease a year," they pointed out. "The first one in Spring is extremely serious because the insects are contaminated with spores of the Dutch elm disease fungus. As the beetles feed on tender bark of the twig crotches, the spores enter the water-conducting vessels of the trees and cause infection.

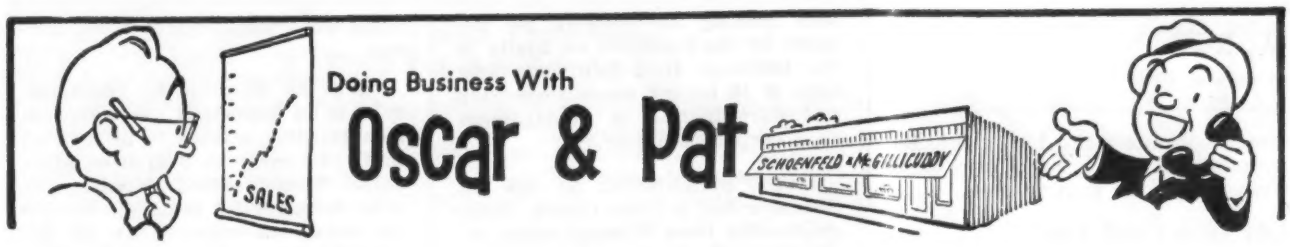
"The beetles then bore under the bark of the trunk and large limbs of elm trees and a second brood develops. This year, favorable weather conditions resulted in an unusually heavy second generation. The adults appeared in August, feeding on leaves (which were still green because of summer rains) and in twig crotches. Next spring larvae in these tunnels will change to winged adults that will become a threat to other elms."

N.J. Tomato Season Termed Successful

TRENTON, N.J. — New Jersey's 1958 canhouse tomato season is over, reported Malcolm N. Edmonston, chief, Bureau of Fruit and Vegetable Service, New Jersey Department of Agriculture. It was a highly successful season, he added, as yields were at record levels, and tomato size and quality were excellent.

According to the last estimate of the New Jersey Crop Reporting Service, the 1958 production of processing tomatoes will amount to 268,800 tons, 56% above the drouth-stricken 1957 crop. The indicated 1958 yield on Sept. 1 was 12½ tons per acre, near record for New Jersey.

Thirty-two federal-state inspectors worked in the field this summer. Under Mr. Edmonston's direction, the inspectors grade the cannery crop for quality, color and freedom from defects and decay. Canners use the inspection service contract and buy on the basis of standards established by the U.S. Department of Agriculture and used throughout the country. Six major New Jersey canneries used the inspection service this season.



Doing Business With

Oscar & Pat

When Pat McGillicuddy came back from lunch that day it was only 1:15 p.m. Oscar, his partner, sitting at his desk figuring discounts, blinked his eyes, looked at the clock. This time he did not frown. It was unusual for Pat to be back from lunch short of 2 or 3 p.m. what with his Chamber of Commerce, Rotary, Kiwanis and other meetings he always liked to attend.

Pat looked through a few magazines, then said, "Oscar, there is something I'd like to discuss with you."

Oscar did not look up from his work. In fact, he said nothing.

"Oscar, I was speaking to you."

Oscar sniffed. "Ach, I am working. Talk is cheap. No more promotions. I know you. You can't soft soap me."

"You remember those colored slides I had made of pictures I took on fertilized and unfertilized crops?" Pat said. "Well, I would like to show them to farmers to stir up more attention to late fall fertilizer applications. Even if they don't buy fall fertilizer, they may place early orders for spring delivery."

"You spendt too much on pictures," Oscar snapped. "Go oudt and collect or you won't get paidt Saturday. Can you standt that?"

"Hardly," said Pat. "Nora and I seem to have a lot of bills coming up. Thought we had them cleaned up last month, but they keep cropping up. Oscar, if we show these pictures to farmers, we can invite about 100 of them. The undertaker will rent us his folding chairs cheap.

"Ach, they will just want to come and get free coffee and doughnuts. They won't buy anything."

"Oscar, don't be so pessimistic. You always look at the dark side of things."

Oscar grunted. "I look at the dark side until all the money people owes us comes in. I don't see much daylight these days."

"I think I have a good idea to draw a lot of farmers for this meeting," Pat said a little eagerly. "I talked with Carl Brandt, the vocational agriculture teacher, at high school. He is willing to come here for the meeting, and talk for a half hour or so on what the vo ag classes at high school teach and what the boys are accomplishing. That will really be a drawing card."

"Ach, those ag teachers and county agents knocks us," Oscar growled. "We shouldt tell them to stay away from us—not invite them here."

Tillie Mason, the plumpish bookkeeper, spoke up. "The argument is getting hot, gentlemen. I'm going out for coffee at the Slide Inn. Call me when the argument is over."

"Now see what you've done," Oscar snapped. "We lose Tillie's time and our own by your silly schemes."

Pat's eyes glistened. "It's not wasting time, Oscar. If the vo ag teacher comes here, he'll attract many farmers. And he'll sit through the showing of the slides. He'll see that we're doin' the right thing in selling fertilizer and farm chemicals. He can see how we help farmers take soil tests and sell on the basis of recommendations. This is our chance to make a friend of him."

"Ach, what goot will it do to make him a friendt? He don't buy fertilizer."

"Of course, he doesn't, but those farm kids he teaches do. Or their fathers do. If the ag teacher talks kindly of us, the kids'll go home and tell their dads. So we benefit. We ought to win the friendship and understanding of the vo ag teachers and the county agents. They can do us a lot of good."

Oscar flung down his pencil in an unwarranted mood of recklessness. "McGillicuddy, when will you learn that their way to sell fertilizer is to standt behind the counter, get the order and collect cash? You don't sell by chasin' aroundt to all the meetings and entertaining the whole town. That makes you and us suckers. We spendt more money than any other business in the county in the farm supply line."

"Well, begorra, our volume is bigger than any of them, too," snapped Pat, now getting a little angry. "I'm telling you, Oscar, it is hard work selling. That's something you don't know anything about, because you don't do any of it. All you do is sit in that chair, and—and—"

Oscar bristled. "Ach, it's hardt work sitting in the chair and figuring when the money is coming in to pay the crazy bills you run up. It's harder than selling! You try it and see how quick you go bankrupt. You don't know anything about business. You neffer look through the books. You don't know enough about it. If I didn't post the prices of fertilizer in your sales book, you wouldn't know what prices to charge. Ach, don't talk to me about how important you are in this business. You don't soft soap me, you Irisher. I can look right through you, ach, and look back again, too."

Pat breathed hard. His right hand clenched a big magazine. "Oscar," he said, "let's quit this kind of talk, before we fly at each other's throats. Okay, I won't show the slides to a big group. I'll borrow a projector and go and show them to farm groups nights on my own time. And I'll try to cultivate the good will of the vo ag teacher and county agent in their offices."

Oscar growled several times. "Here take along this list of poor pay farmers," he said. "After you show them the nice colored slides ask them to fork up the gelt to pay these old bills. That's important, too."

HIRING A KEY

(Continued from page 9)

in the person who expects to be chosen to fill the key spot, but also in the other employees making up the subordinate staff. If you decide to bring in an outsider you should discuss the reasons for doing so with your own man who expected to get the job, and with the subordinate staff supporting him—prior to filling the vacancy. By so doing, you can go far towards maintaining the loyalty and cooperation of your entire staff.

What Will the Man Be Expected to Do?

Many small businesses are one-man shows. Heads of small companies tend to be individualists, energetic entrepreneurs. That's why they're in small companies of their own, and often why they have been successful. But it often means, too, that they can't delegate real responsibility to others. Some say they'd like to—but no one else seems able to make the decisions they'd make.

The president of one small plant spent six months finding an able executive to become works manager. Before another six months ended, the new man resigned. "You don't want me," he told the president. "You just want an assistant."

In hiring, you pay one price for technical skill, and a higher price for executive capacity. It's a waste of money to hire a decision maker if, in reality, he'll always be supervised closely by you.

What Kind of Man Should He Be?

When large organizations hire, they often write rigid specifications for the man they want: age, education, experience, and so on. This isn't selection; it's rejection. They're seeking to fit a man into an established pattern.

It's a poor method for you. The most successful small businesses got that way by being unique, not by imitating large firms. Their vitality comes from men—men who aren't cut from a pattern. If you compete with large companies in hiring, you'll have to outbid them—which isn't easy.

The best man for you may be one who'd have difficulty fitting into a job in a large company. You can make your "best buy" in hiring if you're not competing with big corporations. For example, large corporations prefer not to hire men over 40; sometimes even men over 35 are rejected because of age. If you avoid that artificial age barrier, you may well be able to find a seasoned executive, an older man with solid experience, on terms you can afford.

Don't rule out the "off-beat" men by arbitrary specifications. Of course, the mere fact that a man is unusual doesn't always make him right. But your best choice is very likely to be from among the unusual men.

Let Him Find You!

Somehow—by advertising, or word of mouth, or through employment agencies, or through placement services in educational institutions—you must make your wants known. You'll make some kind of announcement, hoping this will bring in applications or inquiries. You'll sift out those that seem promising. You'll investigate, narrow down to a few, then—hopefully—make a selection.

It's easy enough to gather a sheaf of applications. But how can you maximize the likelihood of the right man being among them? Not by announcing restrictions ("Mechanical Engineer, age 35-40, minimum 5 years plant manager metal-working . . ."). This kind of notice may well drive off the very man you'd find most valuable. Even if your restrictions don't shut him out, your advertisement may not interest him. Many advertisements say what the employer wants, but say little about who he is or what he offers. Good men, men sure of their own worth, are likely to ignore them.

What will attract the man you want? Don't try to describe him; describe the job:

"PLANT MANAGER: Plastics company needs man to take full responsibility for production, research and development. Modern plant (in central Ohio), 150 men, custom line of sheet, laminated and extruded products covered by own patents. Company is family-owned. Steady growth over 12 years, further expansion planned. Plant manager will have future opportunity for promotion and stock ownership. Compensation open."

Even this may be too brief a description of the opportunity you offer. It depends on what you want. An advertisement such as this (assuming it reaches a representative audience) would probably attract some high-priced men, men with good records of performance. It would probably attract a larger number of men who haven't yet held such a responsible job—but who'd like to try.

Fit the Job to the Man

By further description you could change the appeal to suit your wishes. But notice that this method leaves you flexible. You don't have to make final decisions about exactly how this job would fit into your organization until you have actually seen the men who reply. For example, your final choice might lie between two men:

HARRY MEDFORD: He's 42, an engineer and an experienced line executive, now managing a plant larger than yours. His present salary is higher than the maximum figure you had in mind. However, salary isn't his primary concern. He's leaving his present job because he can't acquire an equity in the business. He'd join your firm only if it meant stock ownership and participation in management as a corporate officer.

PAUL SHANNON: At age 34, Shannon has a good record. Since graduating from Massachusetts Institute of Technology he's worked for two companies: as process engineer, foreman, chief industrial engineer, and plant superintendent. Because your job would be a big step up for him, he's willing to take it for substantially less than your top figure.

Assuming both of these men check out as well-qualified in other respects, and if you should find both of them personally congenial, your decision might be made on one of the following two bases.

By choosing Medford, you'd upgrade the job, turn over to him many of your own responsibilities. Now, or soon, he'd function as executive vice president, leaving you more time for forward planning and business development.

By choosing Shannon you would need to accept less immediate risk, but there would be some delay in your plans. You'd have to turn over responsibilities to him gradually, letting him grow with the job.

Will He Fit In?

A new executive's relationship with other people in the company is important. This does not mean so much who reports to him and who doesn't. It means rather how the new person gets along with the people already in your organization. If personalities clash, teamwork suffers. Therefore, it pays to consider personal relationships before you hire, not after.

A good way to size up the situation in a small concern is to have people who will be working with a new man meet and talk with candidates. While this is going on you can observe reactions. Later you can ask your own people what they thought of the prospect.

"Will he fit into the community?" is an important question, too. Ken Harding seemed to be a "real find." As early as 3 months after John Bascom hired Harding as sales manager he could see results far above his expectations. At the end of 6 months he called Harding into his office to tell him about a substantial salary increase—and was shocked when Harding said he was quitting.

"My wife can't take it in this small town," Harding said. "She's a big-city girl, and she's going nuts out here, especially since I have to be away so much. I hoped she'd get used to it, but it's not working out."

Problems like this are all too common. A man is hired because he seems right for the job. Too little attention is often given to the fact that a job is also a way of life. If you think you've found the right man—don't be hasty. Take the time and spend the money to explore the problems of adjustment. Give him the opportunity to look your situation over and make his own decisions. Let others in your organization take part.

How Can You Appraise Ability?

One hard part of hiring an executive is judging personal ability—what he knows and what he can do. Three kinds of information can help: records of past performance, personal statements a man makes about himself, and what others tell you about him. It pays to dig into these sources before you decide on a particular individual.

- **Actual records** are such things as the figures a sales manager presents to show that over the last 5 years he achieved an increase in volume of 60% while his sales force rose by only 20%.

- **Personal statements** mean remarks like: "My main interest is

SUMMARY

Sometime you will probably have to hire a key executive for your small plant. Few decisions will have such influence on the future of your business as those you'll make in bringing in that man. Large corporations can depend on averages, in hiring and in promoting from the ranks. Outstanding men can be moved up, inadequate men shifted into less demanding jobs. But how many key executives do you have? If yours is a very small plant, the new man may be second only to you in responsibility and influence. In any case, he will be entrusted with an important aspect of your business.

There is always risk in hiring. No amount of thought and care can eliminate all of that risk. You may have to bid high to attract the right man. Therefore, sound business judgment calls for minimizing risk by detailed planning and thoughtful selection. Take care, also, in framing your offer—basing it on terms that leave you a way out in case of need. The consequences of hiring a key executive—good or bad—in a small business can be as far-reaching as adding a new product line or building a new plant. The accompanying Small Business Administration aid is designed to suggest a systematic approach to the problem.

SHOP TALK

OVER THE COUNTER

By Emmet J. Hoffman
Croplife Marketing Editor

Three Ruritan Clubs in Currituck County, North Carolina, have opened a concentrated soil testing drive in an effort to obtain soil samples from every field in the county. The plan deserves the support of every fertilizer dealer in the county as well as of the entire industry. Some of the ideas incorporated into the project should be of interest to dealers across the country.

The project is being set up as a contest with the various county communities competing against one another for top honors. The largest degree of participation by community members and number of samples collected will serve as the basis for selecting the winners. The drive ends Dec. 1.

Analyses of all samples taken will be carried out by the State Soil Testing Laboratory at Raleigh. Fertilizer and lime recommendations will be made in accordance with the soil tests.

Don Alexander, Smith-Douglass Co., Inc., and county agent Luke Powell are co-chairmen of the drive, and will supervise the entire county operation.

The Plant Food Institute of North Carolina and Virginia, Inc., the American Potash Institute, and the National Plant Food Institute are cooperating in the soil testing drive.

A number of leaders from the winning communities will be invited to visit the soil testing division of the North Carolina department of agriculture and the soils department at North Carolina State College on completion of the contest.

Ruritan Clubs will hold several evening meetings for farmers, at which time representatives of the soil testing division of the North Carolina Agricultural Extension Service will discuss the procedures for taking soil samples. During the afternoon preceding each meeting, the committees in charge of the various community operations will receive special instructions in soil sampling in the field.

Ruritan is a service organization composed of farmers and agricultural leaders who are interested in furthering the welfare of agricultural communities.

An organizational meeting was held recently in Currituck County. Representatives of the following groups participated in the kick-off session: Representatives of Ruritan; Agricultural Stabilization and Conservation Committee, U.S. Department of Agriculture; Soil Conservation Service, USDA; vocational agricultural teachers, the fertilizer industry, and lime dealers.

quality. I'd rather work on a low-volume, carriage-trade item than on a cheaper-grade, mass produced product." Only the man himself can tell you this kind of thing.

To be sure, you have to check up on the accuracy of a person's statements. To do this, watch for inconsistencies in what is said about accomplishments and interests. See if the figures mentioned (dates, salaries, and so on) look reasonable. Where you have doubts, ask further questions. When you can, review actual records and talk with people who know your prospect's history.

• **Information from others** usually comes through checking references. It can have great value. A former supervisor may tell you, for example, "Jim's approach may seem unorthodox, but he has a remarkable ability to get people working together." This fact is important to know before picking a man.

But don't automatically reject a man because of a poor reference. Keep in mind the fact that it may stem from a clash of personalities, the circumstances of his resignation, or some other situation which is unrelated to his suitability for your company.

What About Money?

You may have to do some bargaining to get the right man. But the initiative in bargaining should be yours. Asking him to name his terms first may seem shrewd, but it's likely to lead to a bad bargain or no bargain at all.

A good way to begin is to review the present compensation of your existing management group. Are salaries and other forms of compensation adequate, equitable, and in proper relationship? If not, any deal you make with the new man is likely to cause trouble. Don't count on secrecy; the facts will come out soon enough. For further suggestions on methods of compensation see Management Aids for Small Manufacturers No. 77, "Executive Incentives in Small Business."

Here are some points to keep in mind:

(1) Don't over-extend your position. It's a good idea to have a 5-year compensation plan in mind. If you offer too much now, you limit your ability to reward performance in the future.

(2) Don't drive too hard a bargain. Sometimes a good man is in a tight spot and would, if pressed, accept less than he's worth. Exploiting this advantage wouldn't begin your relationship on a good footing.

(3) Leave a way out—for both of you. However careful you are in hiring, and he is in choosing an employer, you're both predicting. A year or so of experience together counts for much more. The risks of failure should be shared. Face up to this at the time of hiring, and talk as concretely as possible about how the relationship would be terminated. You should expect some penalty for termination, but it should not be so steep you'd keep an unsatisfactory man rather than pay it.

(4) Consider setting up blanket severance terms. You may find it wise to make them effective regardless of whether the termination is by dismissal, quitting, or mutual consent. If a man wants to leave, deterring him does you no good. (Obviously, of course, there must be conditions, even if only a time limit. You don't want to pay him a bonus for taking a better job elsewhere!)

(5) Don't over-rate financial compensation. Money is not equally attractive to everybody. Often a man will set his price high because he's dubious about the situation. If you're candid with him, letting him know all the relevant facts, he may be glad to meet you half-way. (Above all, don't conceal the kinds of unpleasant conditions he will confront soon after reporting for work!)

How Permanent A Relationship?

When large corporations hire, it's for life, if all goes well. They can offer ample opportunities for growth and promotion. Small businesses can't duplicate these opportunities. So it is that, of necessity, big and little companies often serve as training schools for each other.

Gardner Corporation's personnel manager, Cliff Rogers, is paid $6,500. He's ready for promotion—not just more money, but more responsibility. Where will he find a bigger personnel job? Probably in a bigger company.

If it doesn't happen too often, some turnover in your middle management group can work to your advantage. If you have a young man with ability and ambition, be frank with him about the opportunities you can offer. If it's to his best interest to make a move, help him find a better job. It's far better for morale to do this than have men job-hunting without your knowledge.

You can hold good men, perhaps, by raising salaries. But there are limits beyond which it makes little sense to pay more than the job is worth, just because the man is worth more. Replacing him can benefit you. For example, if he was your production manager, he may have done a wonderful job of improvements in plant layout, tooling and production methods. To replace him, you might seek a man with a different set of skills—who might make major gains in labor relations, employee productivity, and quality of supervision.

The man you want to keep is the one on whom you are counting for the future: the man who may replace you some day; the man who could take charge of the new plant you're planning to buy or build; the man who has a central role in a major program now taking shape. Even if such a man is paid only straight salary, he "owns" a part of your business—in that your equity would suffer through losing him to another concern. Giving him a share of actual ownership, so his interests coincide with yours, may be essential to the security and progress of the enterprise.

Lime Production Down

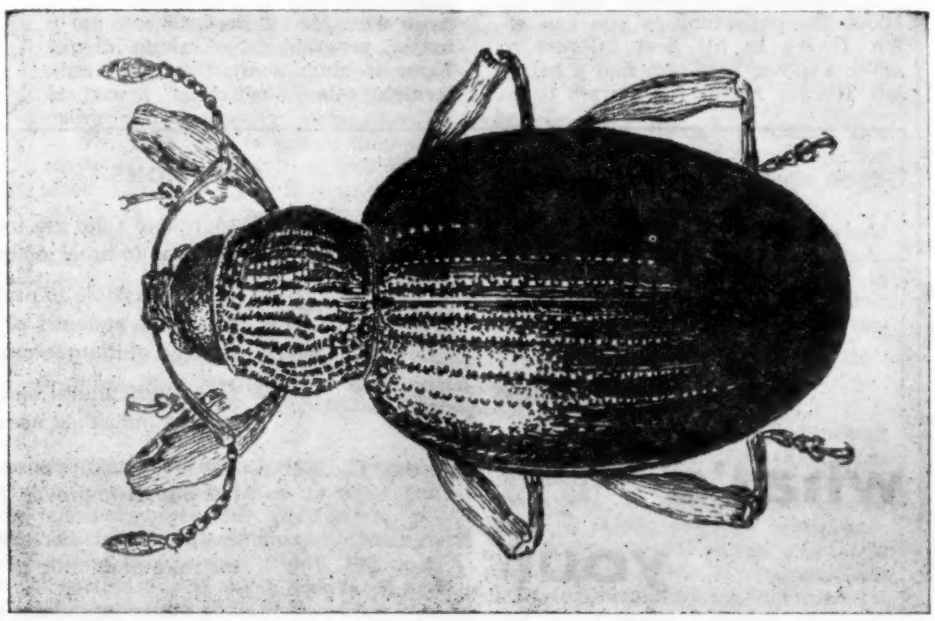
WASHINGTON — Production of agricultural lime in the U.S. during August was 13,376 short tons compared with 19,331 short tons for the same month last year, reported the Bureau of Mines, U.S. Department of the Interior.

PACKAGE CONTEST

NEW YORK—The seventh annual aerosol package contest to select the best aerosol packages of the year will be held in conjunction with the 45th annual meeting of the Chemical Specialties Manufacturers Assn. at the Hotel Commodore, New York, Dec. 8-10, 1958.

BUG OF THE WEEK

Mr. Dealer—Cut out this page for your bulletin board



Strawberry Weevil

How to Identify

The adult weevil, illustrated above, is described as being reddish-brown in color, measuring from 1/12 inch to ⅛ inch in length. Young grubs of the species are soft-bodied, white and legless. They remain in this stage for about 4 weeks before entering the pupal stage.

Habits of the Strawberry Weevil

Adults are active during the early part of the summer, feeding until about mid-summer, then going into hibernation, sheltered under trash, where they remain for the rest of the summer, fall and winter months. Emergence from this stage is in the spring. The female weevil makes a puncture in the strawberry bud and inserts an egg. The young grubs that hatch within the bud feed on it and stay on through their pupal stage, emerging as adults.

Damage Done by Weevil

As described, the strawberry buds are killed through the egg-laying of the adult beetle and the feeding of the young within the bud. Infested strawberry plants are characterized by killed buds and fruit hanging on partly-severed stems. In addition to strawberries, the pest attacks wild blackberries, raspberries, and dewberries. Its distribution is in the eastern part of the U.S.

Control of Strawberry Weevil

A number of insecticides, both old and new, have been recommended in various states for control of this pest. In view of the possibility of residues remaining on the berries, extra caution should be taken in applying any toxicant. State experiment station entomologists and county agents should be consulted for local recommendations.

Illustration of Strawberry Weevil furnished Croplife through the courtesy of the U.S. Department of Agriculture.

PRESIDENTS

(Continued from page 8)

with shaping the trends of agriculture. Their activities have continued with rather startling developments in farm equipment all the time. The chemists, however, seem to be having their field day right now. The rapid development in fertilizers, insecticides, weed killers and whatnot is revolutionizing farm production. Right now it appears that chemistry occupies the agricultural limelight."

Pesticide Hazards Big Consideration During Hatch Term

By Fred W. Hatch
Retired Manager, Shell Chemical Corp.
New York

ASSN. PRESIDENT 1955-56

THE YEARS of my administration were marked by a number of important events which had a profound and long-lasting effect on the trade and its operations. Preoccupation with the public health aspects of insecticides kept industry leaders on the alert, and the Food and Drug Administration people very busy.

Here are some of these happenings which may be long remembered by the industry:

On Oct. 23, 1956, the Food and Drug Administration published in the Federal Register a notice that certain additional toxicity tests to determine potentiation would have to be conducted on organic phosphate pesticides before any new residue tolerances would be established. These tests were not only time-consuming and expensive but, because of certain requirements, they made it impossible for a company to plan its test program or to know just how soon it could get a tolerance and thereby be in a position to market its product.

Because of the industry-wide importance of the problems created, a conference of all producers of organic phosphate pesticide chemicals was called. The conference, held on Nov. 28, 1956, resulted in the formation of the NAC organic phosphate potentiation committee under the chairmanship of Dr. R. Emmet Kelly of Monsanto Chemical Co. The committee complied and analyzed extensive data on phosphate potentiation and reached the conclusion that the tests previously specified by FDA could be modified to industry's advantage without in any way jeopardizing the public health.

The committee submitted a report to the FDA and requested an easing of the testing requirements. FDA agreed with the findings of the committee and did modify its test requirements as proposed. This was of considerable help to the industry.

A second well-remembered event was the formation of the NAC regulatory advisory committee. Because members of the industry were encountering certain procedural and technical problems in their operations under the Miller Pesticide Residue Amendment and the Federal Insecticide, Fungicide, and Rodenticide Act, there was created, on the recommendation of the NAC board of directors, the NAC regulatory advisory committee in May, 1957. George E. Lynn of the Dow Chemical Co. was appointed chairman. Its principal objectives have been to analyze and resolve, as far as possible, these problems through study and consultation with the FDA and the pesticide regulation section of the U.S. Department of Agriculture.

The committee has achieved considerable success in its endeavors and it is believed that the administration of the two laws is progressing more

Current President Expects Greater Advances in Future

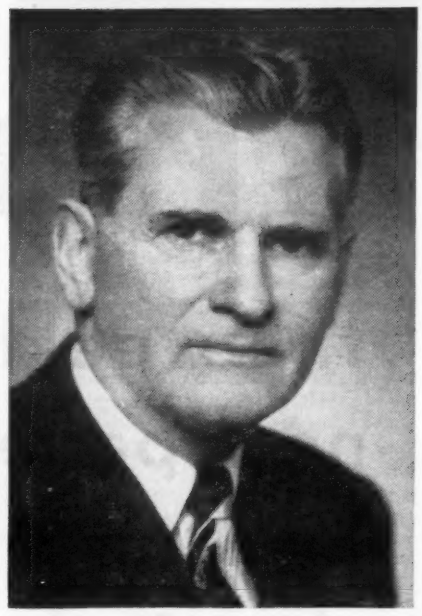
By Jack Vernon
Vice President, Food Machinery & Chemical Corp.
New York

ASSN. PRESIDENT 1956-

DURING THE 1958 season, severe insect outbreaks of great economic importance have, with a few exceptions, been negligible. To achieve this record of minimum crop damage, the cooperative efforts of many people and organizations have been necessary.

In this respect, I should like to compliment federal and state authorities and county agricultural

(Turn to PRESIDENTS, page 19)



Jack V. Vernon

PRESIDENTS

(Continued from page 17)

agents on their alertness and diligence. At the same time, the manufacturing industry and the applicators, aerial and other, have displayed a responsiveness without which these results would have been impossible.

It appears that with industry ready and able to make available the proper toxicants at the right time, with federal and state agents helping to determine where and when action is necessary and with the applicators carrying out the job in a thorough manner, it is now practically impossible for serious infestations to get out of hand as they have in the past. The further continuation and expansion of this type of cooperation can only result in more effectively safeguarding the future of our nation's agriculture.

In spite of the fine record to date it should be recognized that there is yet much to be done. The extent of damage caused by plant pests is great—running into millions of dollars annually. In order to present all of the facts relating to the economic advantages of proper use of pesticides and to allay fears that may arise in the public mind, a good sound educational program is needed. Such a program must be a combined effort on the part of industrial, federal, state and various agricultural organizations.

In behalf of the industry, the NAC is planning such a program for 1959. I would like to recommend to representatives of other groups mentioned above that they also make a concerted and strenuous effort to establish and carry out such an educational publicity program for the coming year.

I believe I can safely state that our industry has fared a little better in 1958 than last year. However, there are specific situations where certain of our products for use in localized areas have not come up to last year or the expected volume of the manufacturer. In our kind of business this is not an unusual situation. Much has been said about the generally improved financial conditions in American agriculture. This is true for certain segments, but in other areas it is not true.

One would probably deduce that if agriculture as a whole shows financial improvement, then it should follow that the pesticide industry serving agriculture should also have improved its financial condition. Again this is not necessarily true, since it all depends on whether or not the products of our industry are needed in the areas where these improvements are shown.

Our industry is spending many millions of dollars in research for the future usefulness of agriculture, improving plant facilities, building new ones, gambling that infestations will occur and weather conditions will be favorable for good crop growth in the succeeding year. Yet with all these uncertain and unknown elements entering the picture, the return on investment is much, much too low and below the averages for many other kinds of industries. In short, the risks involved call for greater return if the industry is to successfully combat the crises inherent in our business.

In order to continue to serve adequately our important customer, agriculture, it is necessary that cost reduction programs be examined continually. More efficient methods of production must be adopted, more effective products must be developed in order that an improvement in the return on invested capital can be made.

Considering all the hazards and uncertainties of doing business in this industry, I feel I would be remiss in not calling attention to this important phase of our business. If we are to have a healthy dynamic growth-type industry to meet the challenge of being prepared at all times with food and fiber for the welfare of our people at home, our friendly allies in foreign lands, and in defense against the Communist doctrine, we must adopt those policies, procedures and common sense business practices which are necessary to the accomplishment of these goals.

Survey of Commercial Apple Orchards Completed

According to a survey of Vermont commercial apple orchards, first complete survey of this kind, conducted during 1957 growing season, 86 orchards of 104 were found to be of commercial importance. The 86 orchards involve 3,562 acres on which 122,000 trees are being grown. In line with a trend observed from other orcharding states, orchards of 500 trees or less have only 4% of the tree population while even though only 22% of the orchards were above the 2,000 tree size, they included more than 56% of the tree population.

McIntosh is far ahead of any other variety in Vermont with 64% of the tree population followed by Northern Spy with 12% and Red Delicious with 10%. Cortland is the fourth important variety with only 6%. Greenings are down to 2%. This is the continuation of a definite trend during recent years to fewer varieties. With better than 90% of Vermont's commercial apple trees limited to four varieties, it is not at all surprising that Baldwins, Wealthy, Fameuse and Northwest Greenings are no longer being grown, according to orchard experts.

Monsanto Provides for 75% Expansion With New Agricultural Research Lab

ST. LOUIS — Monsanto Chemical Co. has geared itself for a possible 75% future expansion of its research effort on new chemicals for farming with its new agricultural research laboratory now in operation at the company's headquarters site in suburban St. Louis, it was announced.

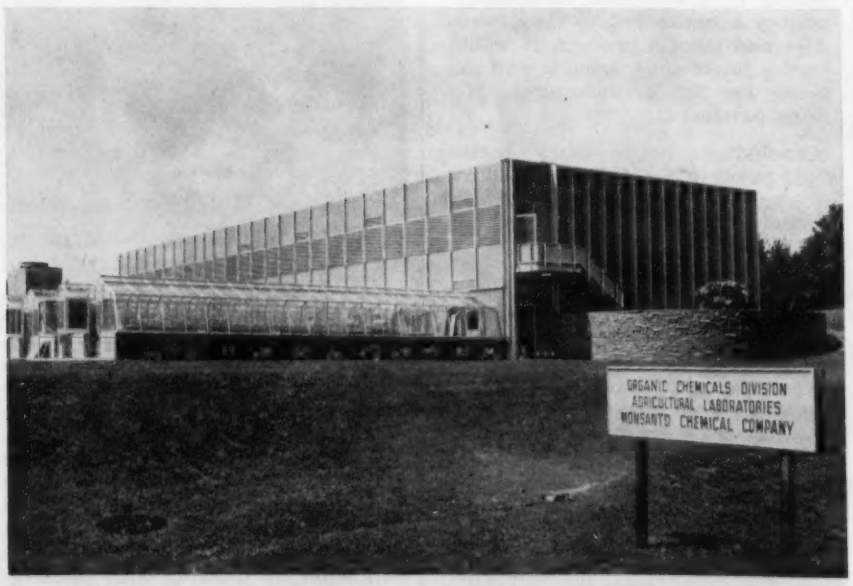
The new facility, a two-story structure of porcelainized steel, plastic and glass, provides more than 25,000 sq. ft. of floor space for its research staff; includes laboratories, offices, conference rooms, a research library and eight adjoining greenhouses.

In its laboratories and greenhouses, scientists carry out tests of the effectiveness of new chemicals as possible insecticides, weed-killers and agents for the control of plant diseases. In addition to chemists, the scientific staff includes biochemists, entomologists, plant physiologists and pathologists, microbiologists and agronomists.

Modern equipment has been added, including four "climate control chambers," in which climatic conditions can be simulated and controlled at any practical combination of temperature, sunlight and humidity.

The entomological laboratory at the facility includes a room-size "insectary" where many thousands of insects are housed in ideal rearing conditions to provide a continuing source of healthy "enemies" for chemical conquest.

According to Monsanto, agricultural losses due to weeds, insects and diseases in the U.S. currently average about $13 billion annually, or roughly one-third of the total value of the nation's yearly agricultural yield.



NEW LABORATORY—The expanded agricultural research laboratory now in operation by Monsanto Chemical Co. at its headquarters site in suburban St. Louis includes 16 laboratories, offices, conference rooms, a research library and eight adjoining greenhouses; space for a possible 75% future expansion of Monsanto's research effort in pesticides.

FERTILIZER

(Continued from page 1)

called business recession, can be explained by the facts that:

(1) U.S. personal income for the first six months actually was higher than a year ago, (2) agriculture has suffered a deflation since World War II and the current gains were made from a lower base than the general economy, (3) red meat supplies are less this year and the production of grains and cotton has been affected by price supports or other special arrangements.

The speaker summarized the trends in livestock, poultry, grain, cotton and fruits and vegetables and concluded by calling attention to three sets of problems facing the farmer, (1) the "farm cost creep," (2) problems associated with the new "economics of scale" and (3) the problem of surplus farm supplies. As to the first, increases in general costs have had more effect on farmers' costs over the past few years than on prices of products sold by farmers. Farmers must not only pay higher per-unit cost rates but current technical advances are also such that farmers must increasingly use purchased rather than farm-produced resources.

The second problem has to do with the speed-up in agricultural economy, he said. Economies in costs of production as well as assembling, processing and distributing farm products are noted, but in many cases a reduction in costs can come about only from increasing the size or scale of farm operation. This has brought about contract farming, agri-business integration and business mergers.

Dr. Wells said he believes that farm surpluses will continue for some time. "That this is a continuing problem and not one with a quick, painless answer is, in itself, progress," he said. "Now there is a tendency to look not only at possible ways of controlling acreages or production, but also to look at ways and means of using the surpluses constructively."

Agronomic evaluation and uses of fertilizer consumption statistics were discussed by Woody N. Miley, extension soils specialist, University of Arkansas, Little Rock. The speaker pointed out that consumption figures are very helpful at both the county and state levels. By examining the fertilizer shipment data along with planted crop acreages, the average amounts of plant food used per acre on major crops can be estimated at the county level. Soil testing volume by county can also be compared with consumption.

At the state level, fertilizer recommendations in terms of total plant food along with suggested grades and materials can be ascertained from consumption statistics. On a regional basis these statistics also have been helpful. Recently considerable progress has been made toward reducing the large cumbersome number of grades distributed in an area.

Mr. Miley pointed out the following agronomic uses now being made of fertilizer consumption statistics: (1) compiling of plant food usage by year, state-wide and by county, (2) comparing total nutrients recommended with total nutrients consumed as a basis for evaluating education work, (3) associating crop yield results with plant food usage in certain areas, (4) determining the distribution of certain grades and materials as an aid in determining grades to use on soil test reports, (5) determining farmer acceptance of new fertilizers and (6) sounding out farmer experience and judgment in helping to evaluate soundness of recommendations based on soil tests.

A progress report on the NPFI chemical control research project was made by Dr. Vincent Sauchelli. The project set up with the cooperation of the AOAC and the AAFCO will determine variations in results of sampling fertilizer grades according to certain considerations. Dr. Sauchelli explained these considerations include variations as to type of instruments used in the sampling; variations within a specific bag of fertilizer and from one bag to another of the same grade; variations of results within a laboratory and from one laboratory to another; variations from one week to the next. Also it is to be determined if there is any effect from different personnel running the sampling and doing the testing.

Two nationally-known statisticians have been retained by the project to be a part of the task force, Dr. Sauchelli declared. The speaker presented preliminary results on a set of tests, wherein the only significant statistical variations occurred in the nitrogen content of the fertilizer mix and these were found as compared with one laboratory to another.

Dr. Sauchelli said that no final observations can be made until the study is completed. With the cooperation of all concerned it is hoped the results will be presented next year, he said.

The ticklish job of controlling labeling practices of specialty fertilizers was aired by E. A. Epps, Jr., chief chemist for the Louisiana Department of Agriculture, Baton Rouge. Unfortunately, he said, this class of fertilizers is generally produced by companies relatively unfamiliar with industry practices and the products are used by unsuspecting consumers mostly in the home and garden trade. "They can easily be deceived by cleverly-devised wording on labels," Mr. Epps said, "and it is up to us to make certain the claims on the label are justified by the contents."

The speaker listed and described the sometimes ulterior motives behind such labeling and instructional wordings as "natural," "organic," "minor elements," "complete" or "all-purpose," "soil conditioner," "This material will not burn," "no chemical additives," "one tablespoonful makes a gallon of fertilizer," "one gallon equals 100 lb. of fertilizer," "fortified," "organisms," etc.

He also cautioned to look for coined trade names for relatively unimportant or insignificant ingredients. Implied endorsement of products by state or federal agencies also is a problem to watch.

If all manufacturers would work closely with state and federal regulatory agencies before they introduce and label a product, it would save a lot of time, trouble and expense for the manufacturer, Mr. Epps concluded.

Concluding the speakers' portion of the meeting, Dr. J. Richard Adams, USDA, Beltsville, Md., analyzed national tonnage amounts, percent nutrient composition and tonnage of nutrients in materials used for the manufacture of mixed fertilizers. The analysis was based upon Bureau of Census figures of 1954. The speaker noted that although the total tonnage of fertilizer goods may have declined somewhat from the high in 1954, the trend toward higher analysis materials since that time makes up for the losses in total tonnage.

In the year of the census survey, over 40% of the nitrogen in mixed fertilizers was attributed to ammoniating solutions and aqua ammonia; nearly all of the available phosphoric oxide in mixes was from superphosphates and over 95% of the potash was represented by potassium chloride.

NPFI BANQUET

WASHINGTON, D. C.—A banquet honoring members of the Association of American Fertilizer Control Officials was given by the National Plant Food Institute at the Hotel Shoreham here Oct. 16. Paul T. Truitt, executive vice president of the NPFI, introduced the special guests who included officers of the AAFCO, executive secretaries of other associations active in the agricultural chemical industry and representatives of the USDA.

AAFCO OFFICERS ELECTED

WASHINGTON—F. W. Quackenbush, Lafayette, Ind., was elected president of the Association of American Fertilizer Control Officials here at the group's annual meeting Oct. 17. Mr. Quackenbush succeeds J. J. Taylor, Tallahassee, Fla. Other officers elected at the meeting included: Stacy B. Randle, New Brunswick, N.J., vice president, and Bruce C. Cloaninger, Clemson, S.C., secretary-treasurer. The latter was re-elected. The executive committee includes, in addition to the officers, J. J. Taylor; Ernest A. Epps, Jr., Baton Rouge, La.; Charles Marshall, Ottawa, Canada; R. C. Wetherell, Bozeman, Mont., and Floyd Roberts, Tucson, Ariz.

Escambia Opens New Lab in Connecticut

HARTFORD, CONN. — Escambia Chemical Corp. dedicated its new research laboratory at Wilton, Oct. 17, the Connecticut Development Commission announced.

Governor Ribicoff cut the ribbon that symbolized the formal opening of the company's recently completed research and development facility. Company executives, Wilton town officers, local residents and state officials attended.

Escambia, which has its executive offices in New York and its plant facilities in Pensacola, Fla., purchased a 45-acre site in Wilton early last year. It recently completed a modern two-story brick and steel structure with some 50,000 sq. ft. of research space. Company officials explain that the grounds are being landscaped to blend with Wilton's primarily residential atmosphere.

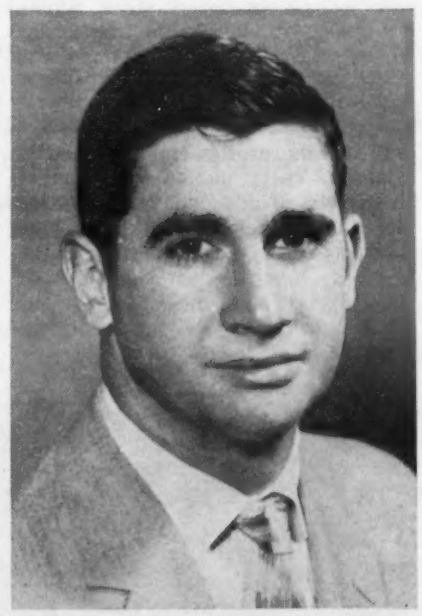
Some 50 persons are employed now, with ultimate personnel of about 100 envisaged by Robert U. Haslanger, Escambia president. More than half of the personnel at any given time will be professional staff, he explained. The Wilton facility will be used exclusively for research in chemicals, including pharmaceutical intermediates, materials for the plastic industry and synthetic organic chemicals.

Kansas Scientists Discover Eriophyid's Summer Home

MANHATTAN, KANSAS — Both the virus of wheat streak mosaic and the mite that transmits that disease may spend the summer on corn.

Tests by W. H. Sill, Jr., and Maria S. del Rosario at Kansas State College here, demonstrated that the Eriophyid mite will live, colonize, and transmit the disease to corn and back again to wheat.

Except for some sweet-corn varieties, Kansas corn has not been susceptible to the disease. The importance of the tests is that the mites and the disease may spend the summer in corn fields and move from corn in the fall to do extensive damage to wheat fields.



TRANSFERRED TO MEMPHIS — Assignment of Hugh Jones to Crag Agricultural Chemicals sales headquarters at Memphis, Tenn., has been announced by Union Carbide Chemicals Co., division of Union Carbide Corp. As a sales representative, Mr. Jones will work under supervision of J. R. Wheatley. He will travel throughout the cotton belt, but will concentrate on market development for new Sevin insecticide in the Southeast by working with pesticide formulators and agricultural experiment station personnel. Mr. Jones was graduated from Texas A&M in 1956 with a Bachelor of Science degree in Agriculture.

Hugo Riemer

EXECUTIVE APPOINTED — Hugo Reimer has been named executive vice president of United States Borax and Chemical Corporation, the firm has announced. Confirmation of the appointment was made by the board of directors in a meeting Oct. 23. Mr. Riemer was formerly president of the Nitrogen Division, Allied Chemical Corp., New York. He will make his new headquarters at the corporation's offices in Los Angeles, Cal., where he will work under J. M. Gerstley, president.

Wild Morning Glory in Top Billing at Oregon Meeting

PORTLAND, ORE.—Control of perennial weeds, such as wild morning glory, will receive top billing at next month's Oregon Weed Conference.

The seventh annual meeting will be held Nov. 12-13 in the Sacajawea Hotel, La Grande. Use of new chemicals and improved weed-control methods will be reported at the conference.

Wild morning glory has become an especially troublesome problem, particularly in the Columbia Basin. The morning glory is found across the state, however, with more than 300,000 acres of Oregon farmland now infested with the weed.

Other perennial weeds that will receive critical study at the conference include Canada thistle, Russian Knapweed, whitetop, nutgrass, and quackgrass.

New chemicals to be discussed at the conference include TBA, PBS, Eptam, and 2,4-DB. Representatives of chemical companies will be on hand at the meeting to help explain use of these new products.

Latest information on ways to control weeds in cereal crops will be discussed by Russell McKennon, feed department, Pendleton Grain Growers; Dean Swan, agronomist at the Pendleton branch experiment station, and Virgil Freed, Oregon State College agricultural chemist. The panel will be moderated by Victor W. Johnson, Umatilla County extension agent.

Australia Solicits U.S. Help For Ammonium Sulfate Plant

WASHINGTON—American dollars and technical advice are being solicited by the Queensland State Government, Mt. Morgan Ltd., and the Rockhampton City Council for the establishment of an ammonium sulfate plant in Australia, it was reported.

The proposed plant is expected to cost $15.2 million and proposed output is about 100,000 long tons annually.

According to the report, all necessary raw materials are available in the Rockhampton area, which is the proposed site.

Mt. Morgan Ltd. is a private Australian company and will provide some of the capital plus certain concessions to the potential investor.

Survey Reveals Size of 'Hoppers Family Dependent on Available Grass Cover

BROOKINGS, S. D.—Grasshopper population levels are probably related to the amount of perennial grass cover, which in turn reduces the amount of succulent annual grasses. This point was made by scientists of the U.S. Department of Agriculture and the North Dakota Agricultural Experiment Station.

The two groups are working together on experiments to find out more about the grasshopper. According to a report received by Bill Hantsbarger, entomologist for the South Dakota Agricultural Station here, the results of the study may change the thinking about the habits of the hoppers. Mr. Hantsbarger said the report indicated that the range populations of grasshoppers are significantly influenced by range conditions.

The grasshoppers prefer the young succulent grasses and this type of grass is essential to egg production, the report stated. It was discovered that good range management reduces the competition between insects and livestock for available forage.

The findings of North Dakota entomologists did not support the old theory that the red-legged grasshopper's (a common pest in crop lands) hatches in alfalfa fields are delayed until after the first cutting. It was believed that since alfalfa shades the ground it keeps the eggs from being warmed by the sun. The scientists discovered 'hoppers hatched at about the same time in fields cut from one to four weeks apart. This was about the same time they hatched in pastures and exposed areas.

Alfalfa has always been regarded as the main preferred food of the red-legged grasshopper. The North Dakoto study indicated that alfalfa alone is not enough for red-legged grasshopper development and survival. Grasshoppers in alfalfa fields eat many other plants — particularly weeds and grasses. They actually show a preference for these food plants.

"If this is true that certain weeds and grass species are essential for the development and survival of grasshoppers it could lead to an additional approach in grasshopper control," Mr. Hantsbarger said.

RETURNS TO FORMER POST

NEW YORK — Hugh Jones has completed a tour of active duty with the U.S. Army and has returned to the White Plains, N.Y., office of Crag Agricultural Chemicals, Union Carbide Chemicals Co., Division of Union Carbide Corp. He is working primarily on the development of Crag Sevin, insecticidal product.

Croplife®

A WEEKLY NEWSPAPER FOR THE FARM CHEMICAL INDUSTRY

The regional circulation of this issue is concentrated in the Northeastern states.

YEARS AND YEARS OF PROGRESS . . .

Industry Looks Ahead to a Brighter Future As NAC Begins Its Second Quarter-Century

TWENTY-FIVE years of trade association growth and development is a long and significant time in any field, but when it comes to weathering the storms and vicissitudes of fortune in the field of agricultural pesticides, such progress is particularly noteworthy. We doff our editorial hat in salute to the National Agricultural Chemicals Assn. upon its reaching the quarter-century mark.

At the association's annual meeting this year at Savannah, Ga., one observes a crowd of some 500 in attendance and wonders what has brought about such growth in the years since 1933 when the group then known as the Agricultural Insecticide and Fungicide Assn., or "AIF Assn.," had a total membership of some fourteen. The annual budget in that opening year was a mere pittance compared to the outlay necessary today to carry on the functions of an alert and helpful trade organization.

Lea S. Hitchner, now executive secretary and treasurer of the NAC, was president from March, 1934 until September, 1940. His close contact with the trade and his guiding hand have exerted a large influence on the direction taken by the association during its 25 years. Those first six years of the AIF's existence were not smooth, easy-going days.

It was during this period that the first official discussion of residue problems took place in the form of an investigation of poison residues by the Illinois Agricultural Experiment Station. Such discussions and studies, accompanied frequently by hostile and fanatical charges by people outside the trade, continued through the years and are of course still being conducted. Likewise, pressure from without has not shown any particular signs of weakening.

The war years were trying ones for the trade and for the association. The government advocated rationing of pesticides, which the association opposed. Food was considered a potent weapon and the AIF carried on many conferences with the U.S. Department of Agriculture on meeting food goals. Quotas were being set for pesticide exports and an active campaign for "victory gardens" was conducted by the association.

In these days, the public was looking upon DDT as being the insecticide-to-end-all-insecticides, but the association went to considerable effort to caution these enthusiasts that no single pesticide is the total answer to every insect problem.

It is noteworthy that the association, in the mid-forties, gained considerable prestige with scientific groups such as entomologists and plant pathologists; a working relationship which has not only remained good, but has expanded in its scope during the past few years. No longer is the pesticide salesman or manufacturer eyed by these scientific groups as charlatans and much of this gain must be credited to the activities of the association.

As the scope of its activities expanded, the old AIF Assn. decided that its name was not entirely accurate nor descriptive of the functions it was actually performing. Thus, in 1949, the group changed its corporate name to its present title, The National Agricultural Chemicals Assn., and moved its base of operations from New York City to Washington, D.C.

Close proximity to the Washington scene and to other scientific and governmental groups headquartered there was no doubt helpful in the stepped-up programs that followed during the early 1950's. Successful efforts were made by the new NAC Assn. to establish good relations with the American Chemical Society, and the association was represented on the pesticide subcommittee of the food protection committtee of the food and nutrition board of the National Research Council, National Academy of Science. Liaison was also established with the American Medical Association during this era of fast development.

Not many associated with the pesticide industry will ever forget the investigation, or inquisition, of pesticides by a House Select Committee which appeared to many as being somewhat prejudicial in its approach to finding answers. An article authored by the chairman of the committee, appearing in a nationally-circulated popular magazine before the hearings were completed, was hardly calculated to win the public's favor for the use of pesticides. Title of the article was "Peril on Your Foodshelf." These were hectic years for the industry.

But not the entire picture was clouded. The first FDA residue tolerances were established in 1951; cooperation increased with the food protection committee of the National Research Council; and the first version of the Miller bill was introduced.

The year 1954 was a significant one, too. It saw the Miller amendment to the Federal Food, Drug and Cosmetic Act become law and at last procedures were established whereby prompt action for setting residue tolerances would be assured. The industry gained somewhat in the direction of better public relations through publicity attending the President's signature on the Miller amendment.

Public relations have continued to be an important part of the NAC's activities and are likely to remain near the top of the list of necessary things to be done. The use of television films plus the encouragement of the association for its members to speak before garden clubs and farm groups are notable steps in the right direction.

After twenty-five years, it is simple enough to look back over a long list of worthwhile achievements, but the industry is not about to relax and ride on its laurels. There are still too many to be gained, and it is evident that they may not be easily won.

It would be interesting to contemplate the next quarter-century . . . or the next fifty years, for that matter. By the time all of the present problems are solved, no doubt new ones will be coming along to test the resourcefulness of the industry's development people.

The development of new toxicants, finding new types of application equipment, improving distribution, evolving better formulations, and getting advanced knowledge on insect physiology and the mysteries of why some bugs seem hard to kill, are just a few of the challenges that face the industry in the years to come.

We trust that most of our readers will be on hand come 1983, to check on what's been accomplished in the next quarter-century. It will no doubt be astounding, just as the past 25-year period has been.

Croplife's Home Office

Croplife

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CROPLIFE is a controlled circulation journal published weekly. Weekly distribution of each issue is made to the fertilizer manufacturers, pesticide formulators and basic chemical manufacturers. In addition, the dealer-distributor-farm adviser segment of the agricultural chemical industry is covered on a regional (crop-area) basis with a mailing schedule which covers consecutively, one each week, four geographic regions (Northeast, South, Midwest and West) of the U.S. with one of four regional dealer issues. To those not eligible for this controlled distribution Croplife subscription rate is $5 for one year ($8 a year outside the U.S.). Single copy price, 25¢.

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MEETING MEMOS

Jan. 28-29 — Illinois Custom Spray Operators' Training School, 11th annual meeting, University of Illinois, Urbana.

Jan. 29-30—Colorado Agricultural Chemicals Assn., Cosmopolitan Hotel, Denver. D. E. Garrison, Box 623, Greeley, Colo., secretary.

Meeting Memos listed above are being listed in this department this week for the first time.

Oct. 27-30—The American Forestry Assn., 83rd Annual Meeting, Gearhart, Ore.

Oct. 28-29 — American Society of Range Management Meeting, Riverview Country Club, Redding, Cal.

Oct. 28-29—Northwest Garden Supply Trade Show, Masonic Temple, Portland, Ore.

Oct. 29-30—Annual Southeastern Soil Fertility Conference, Atlanta Biltmore Hotel, Atlanta, Ga.

Oct. 29-31 — National Agricultural Chemicals Assn., 25th annual meeting, General Oglethorpe Hotel, Savannah, Ga.

Nov. 5-7—Fertilizer Industry Round Table, Mayflower Hotel, Washington, D.C.

Nov. 9-11—California Fertilizer Assn., 35th Annual Convention, Ambassador Hotel, Los Angeles, Sidney H. Bierly, 475 Huntington Drive, San Marino 9, Cal., General Manager.

Nov. 10-11 — Agricultural Aviation Research Conference, Milwaukee.

Nov. 11-13—New York State Insecticide and Fungicide Conference, 20th Annual Meeting; and 11th Annual Pesticide Application Equipment Conference, Bibbins Hall, Cornell University, Ithaca, N.Y.

Nov. 12-13 — Chemical Market Research Assn., Fall Meeting, St. Paul Hotel, St. Paul, Minn.

Nov. 12-13—Oregon Weed Conference, annual meeting; La Grande, Ore.

Nov. 13-14—Southwest Accident Prevention School for Fertilizer Plant Supervisory personnel, Sheraton-Terrace Motor Hotel, Austin, Texas.

Nov. 16-18—National Fertilizer Solutions Assn., Netherland Hilton Hotel, Cincinnati, M. F. Collie, 2217 Tribune Tower, Chicago, Executive Secretary.

Nov. 18-20—Washington State Weed Conference, Moses Lake, Wash.

Nov. 19-20—Carolinas-Virginia Pesticide Formulators' Assn., Carolina Hotel, Pinehurst, N.C.

Nov. 24-25—Entomological Society of America, Eastern Branch, Annual Meeting, Lord Baltimore Hotel, Baltimore.

Nov. 25—Eighth Semi-Annual Meeting and Winter Conference, Manufacturing Chemists' Assn., Hotel Statler, New York.

Dec. 1-4—Entomological Society of America, Annual Meeting, Hotel Utah, Salt Lake City.

Dec. 3-4—North Central Weed Control Conference, Netherland Hilton Hotel, Cincinnati.

Dec. 3-4—Annual Soil Fertility and Plant Nutrition Short Course, University of Missouri, College of Agriculture, Columbia, Mo.

Dec. 3-5—Agricultural Ammonia Institute, Annual Meeting, Morrison Hotel, Chicago, Jack F. Criswell, Claridge Hotel, Memphis, Executive Vice President.

Dec. 8—Annual Soils and Fertilizer Short Course, Coffey Hall, University of Minnesota Institute of Agriculture, St. Paul.

Dec. 8-10—Chemical Specialties Manufacturers Assn., Annual Meeting, Commodore Hotel, New York.

Dec. 17-18—Beltwide Cotton Production Conference, Rice Hotel, Houston, Texas, sponsored by the National Cotton Council.

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Jan. 7-8 — Fertilizer Short Course, Iowa State College, Ames.

Jan. 7-8—Fifth Annual Insect Control Conference, Mississippi State University, State College, Miss.

Jan. 7-9—Thirteenth Annual Northeastern Weed Control Conference, Hotel New Yorker, New York.

Jan. 20-22—California Weed Conference, Santa Barbara, Cal.

Jan. 12-13—Ohio Pesticide Institute, annual winter meeting, Neil House, Columbus, Ohio. J. D. Wilson, Secretary, Agricultural Experiment Station, Wooster, Ohio.

Jan. 21-22—Northwest Agricultural Chemicals Industry Conference, Benson Hotel, Portland, Ore.; George Kitzmiller, Pacific Cooperatives, Portland, conference chairman.

Jan. 21-23—Western Cooperative Spray Project, Benson and Imperial Hotels, Portland, Ore.

Jan. 22-24 — Agricultural Aircraft Assn., Senator Hotel, Sacramento, Cal.; Wanda Branstetter, Chandler Field, Fresno, Cal., Executive Secretary.

July 7-9 — Pacific Northwest Plant Food Assn., 10th Annual Regional Fertilizer Conerence, Tacoma, Wash.

DIRECTORS NAMED

LOUISVILLE, KY. — Federal Chemical Co. has announced the election of George E. Egger, Sam E. Shelby and Daniel L. Street to the company's board of directors.

CALENDAR FOR 1958-59

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Elliot K. Ludington

E. K. Ludington, Chase Bag Executive, Dies

NEW YORK—Elliot K. Ludington, 82, chairman of the board of directors of Chase Bag Co., died of a heart attack on Oct. 8 at St. Clare's Hospital, New York City. Mr. Ludington had been in the bag business more than 60 years.

He was originally from St. Louis, where he was active in civic and industrial affairs for many years. More recently, he maintained residences in Greenwich, Conn. and Miami Beach, Fla.

During Mr. Ludington's tenure as president of Chase Bag, from 1910 to 1934, the firm was expanded from two plants to a nation-wide organization of 13 factories and a paper mill. As chairman of the board he continued active interest in the company, particularly in the development of new products.

Boise Cascade Purchases San Francisco Company

BOISE, IDAHO — Boise Cascade Corp. announced recently that it has acquired control of Ames Harris Neville Co. of San Francisco.

The acquisition involved exchange of Boise Cascade stock for more than 95% of the outstanding Ames Harris stock.

Both firms are manufacturers. Ames Harris has plants in Berkeley and San Francisco, Cal., and Portland, Ore. The Idaho firm announced that Ames Harris will manufacture bags from paper made by a pulp and paper mill at Wallula, Wash.

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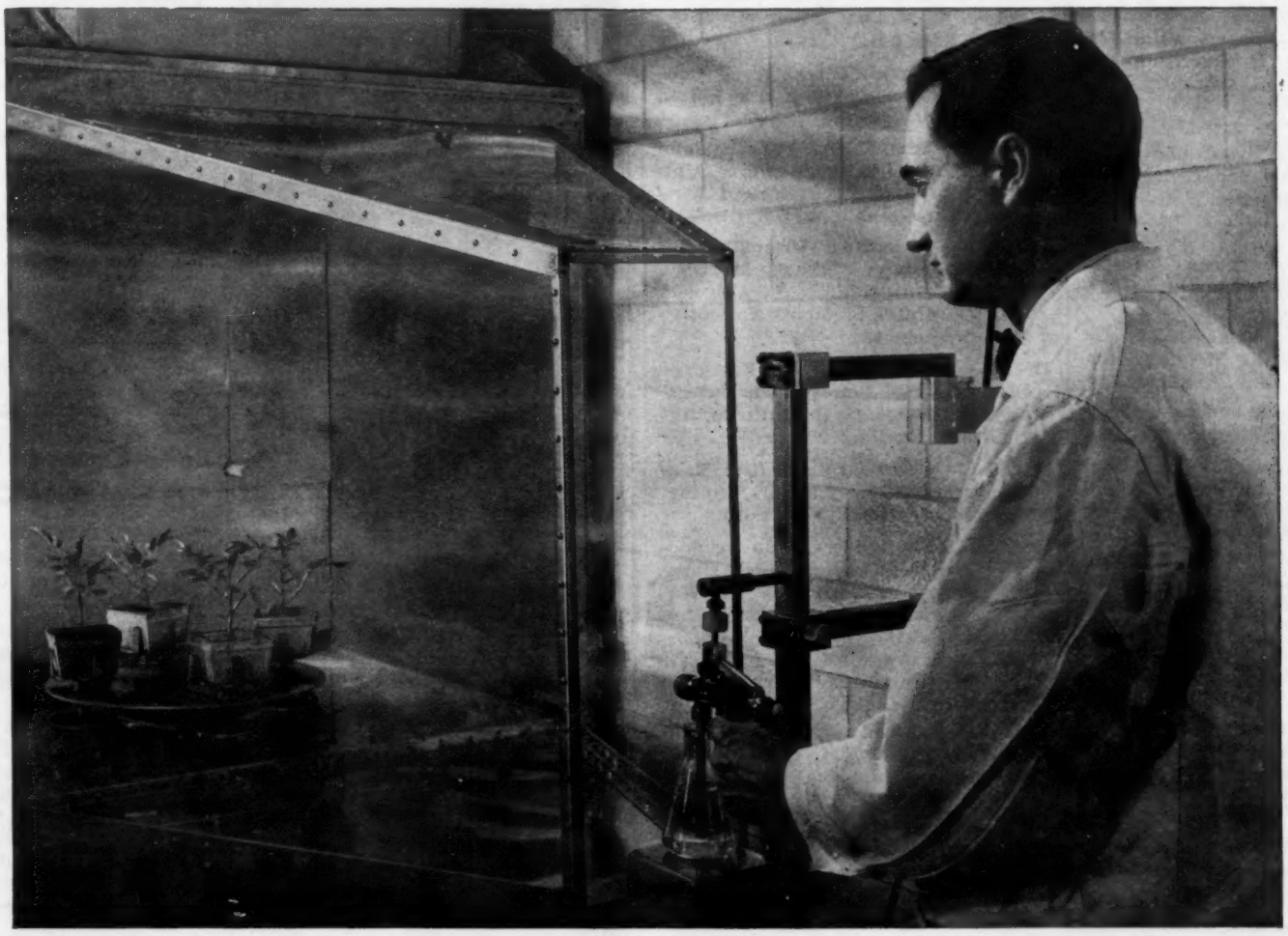

HERCULES RESEARCH–
First Step Toward Improved Pesticides

From the Hercules Research Center and Agricultural Chemicals Laboratories come an ever increasing number of products that contribute to more productive farming and increased comfort for leisure hours. Here are the established members of the Hercules family: *Toxaphene agricultural insecticide; Thanite® for oil base and aerosol insecticides; Delnav* phosphate pesticide; meta Delphene® insect repellent; Delrad® algicide.*

Today in the laboratories research continues on the products that will join them in the future. But before they become available you can be sure that thousands of compounds have been carefully screened and extensive tests conducted in the field because only the best is good enough to meet the standards of Hercules research. That's why you can look to Hercules for leadership in the development of insecticides, fungicides, and herbicides.

Agricultural Chemicals Division, Naval Stores Department

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